

### Municipality of West Elgin Revised Agenda Council Meeting

June 23 2022, 9:30 a.m.
West Elgin Community Complex - Hybrid Meeting
160 Main Street
West Lorne
Electronic Hybrid Meeting

This meeting will be broadcasted and the recording made available after the meeting on the municipal website. If you require an alternate format or accessible communication support or wish to receive the link to the meeting via email please contact the Clerk, at 519-785-0560 or by email at clerk@westelgin.net.

Pages

- 1. Call to Order
- 2. Adoption of Agenda

Recommendation: That West Elgin Council hereby adopts the Agenda as presented.

3. Closed Session

Recommendation:

That the Council of the Municipality of West Elgin Council hereby proceeds into Closed Session at \_\_\_\_\_\_ a.m. under Section 239 2(b) consideration will be given to items that pertain to personal matters about identifiable individual(s) including municipal or local board employee(s)

- 4. Report from Closed Session
- 5. Disclosure of Pecuniary Interest
- 6. Delegations

#### 6.1. BlueMetric - Landfill Annual Report

#### 7. Adoption of Minutes

#### Recommendation:

That the Minutes of the Council meeting on June 9, 2022 be adopted as circulated and printed.

#### 8. Business Arising from Minutes

- 9. Staff Reports
  - 9.1. Planning

#### 9.1.1. H. James, Planner - Severance Application E51-22 – Comments to Elgin County

Recommendation:

That West Elgin Council hereby receives the report from Heather James, Planner regarding the consent application File E51-22 – Comments to County of Elgin (Planning Report 2022-24);

And that West Elgin Council hereby recommends approval to the Land Division Committee of the County of Elgin for the severance application, File E51-22, subject to the Lower-Tier Municipal conditions in Appendix Two of this report;

And further that West Elgin Council directs Administration to provide this report as Municipal comments to the County of Elgin.

9.1.2. H. James, Planner - Service Agreement/Memorandum of Understanding for Land Use Planning Service Delivery – Lower Thames Valley Conservation Authority

#### Recommendation:

That West Elgin Council hereby receives the report from Heather James regarding Service Agreement/Memorandum of Understanding for Land Use Planning – Lower Thames Conservation Authority (LTVCA);

That West Elgin Council hereby approves the Service Agreement/Memorandum of Understanding for Land Use Planning – Lower Thames Conservation Authority, in accordance with the attached agreement;

That the CAO/Treasurer be authorized to sign the agreement;

That the Fees and Charges By-law be amended as related to planning fees, as set out in the attached agreement;

AND that Staff be directed to implement the agreement by adding the additional LTVCA fee to planning applications as of July 1, 2022.

#### 9.1.3. H. James, Planner - May 2022 Monthly Activity Report

104

107

Recommendation:

That West Elgin Council hereby receives the report from Heather James, Planner regarding May 2022 monthly planning activity report for information purposes.

#### 9.2. Operations & Community Services

#### 9.2.1. L. Gosnell, Manger of Operations & Community Services - West Lorne Sanitary Sewer Study

Recommendation:

That West Elgin Council hereby receives the report from Lee Gosnell, Manager of Operations & Community Services re: West Lorne Sanitary Sewer Study; And

That West Elgin Council approve payment from 'Ontario Invests' monies in the amount of \$21,493.20 plus applicable tax to Spriet Associates of London, Ontario for the West Lorne Sanitary Sewer Study.

#### 9.2.2. L. Gosnell, Manager of Operations & Community Services -Large Item Collection

#### Recommendation:

That West Elgin Council hereby receives the report from Lee Gosnell, Manager of Operations & Community Services; And

That West Elgin Council supports staff's decision to eliminate large item collection beginning in 2023 and replace it with a 'Free' large item week at the municipal landfill.

#### 9.3. Clerk's

#### 9.3.1. J. Nethercott, Clerk - Amendments to the Procedural By-law

151

173

148

Recommendation:

That West Elgin Council hereby receives the report from Jana Nethercott re: Amendments to the Procedural By-law; and

That West Elgin Council provide the following feedback on the proposed draft amendments to the Procedural By-law; and

That West Elgin Council direct staff to return with a final version of the amended Procedural By-law at the next Council Meeting.

#### 9.3.2. J. Nethercott, Clerk - Integrity Commissioner/Closed Meeting Investigator/Ombudsman

#### Recommendation:

That West Elgin Council hereby receives the report from Jana Nethercott, Clerk re: Integrity Commissioner/Closed Meeting Investigator/Ombudsman for information purposes; and

That West Elgin partner with the County of Elgin and interested Local Municipal Partners in the Joint RFP to secure a new service provider to fulfill the transparency and accountability roles of Integrity Commissioner, Closed Meeting Investigator and Municipal Ombudsman.

#### 9.4. Finance/Administration

	9.4.1.	M. Badura, CAO/Treasurer - Rodney Wastewater Treatment Plant Refurbishment Project	175
		Recommendation: That West Elgin Council hereby receives the report from M. Badura, CAO/Treasurer re: Rodney Wastewater Treatment Plant Refurbishment Project;	
		And that, West Elgin council directs staff to transfer \$800,000 previously budgeted to lagoon dredging towards mechanical upgrades as part of the Rodney Wastewater Treatment Plant Refurbishment Project;	
		And That cost of lagoon dredging at the Rodney Wastewater Treatment Plant be covered by 2022 OCIF funding.	
	9.4.2.	M. Badura, CAO/Treasurer - HR-1.6 Mileage Policy	266
		Recommendation: That West Elgin Council hereby receives the report from Magda Badura, CAO/Treasurer re; HR-1.6 Mileage policy;	
		AND THAT West Elgin Council hereby approves the amended HR-1.6 Mileage Policy;	
		AND THAT West Elgin Council approve the 2022 CRA recommended mileage rate of \$0.61 per kilometer effective July 1, 2022.	
Com	mittee and	d Board Report	
10.1.	Counc	illor Reports from Committees	
10.2.	Rodne	ey Agricultural Society Minutes - May 26, 2022	272
10.3.	West I 2022	Elgin Community Centre Board of Management - Minutes April 13,	
10.4.	West I	Elgin Recreation Committee	
	10.4.1.	Minutes of May 18, 2022	274
	10.4.2.	Request for Council Grant for Youth Lawn Bowling Night	278

10.

#### 11. Accounts

Recommendation:

THAT the Mayor and Treasurer are hereby authorized to sign Payment Voucher #6A amounting to \$ 234,958.17 in settlement of General, Road, Water and Arena Accounts including EFT #5289-5342, Online Payments# 936-942, Cheques # 25946-25951, and Payroll PP12.

12. Correspondence

12.1.	Elgin County Council Highlights - June 14, 2022	279
12.2.	Professional Engineers Association - Retention of Professional Engineers at Municipalities	283
12.3.	East Gwillimbury - Letter to Hon. D. Ford re Bill 109	285
12.4.	St. Elijah Orthodox Church - Notice of Picnic	287
12.5.	Request for Noise Exemption for fireworks - 116 Angelo Dr West Lorne	289

#### 13. Up Coming Meetings

- Four Counties Transit July 6 at 8 am
- Council July 21 at 9:30 am
- Tri-County Water Board July 26 at 7 pm

#### 14. Council Inquires/Announcements

- 14.1. Notice of Motion
- 14.2. Statements/Inquires by Councillors
- 14.3. Matters of Urgency

#### 15. By-Laws

15.1. By-Law 2022-40 - Tax Ratio

Recommendation: That By-law 2022-40 being a By-Law to set the Transition Ratios and to Levy Taxes for the Year 2022, be read a first, second and third and final time.

#### 15.2. By-Law 2022-41 - Memorandum of Understanding with LTVCA

#### Recommendation:

That By-law 2022-41 being Aa By-law to Authorize the Execution of Memorandum of Understanding between the Lower Thames Valley Conservation Authority and The Corporation of the Municipality of West Elgin, be read a first, second and third and final time.

#### 15.3. By-Law 2022-42 Amend Fees and Charges

Recommendation:

That By-law 2022-42 being a By-Law to Amend By-Law 2021-69 to Provide for Various Fees and Charges for the Municipality of West Elgin for 2022, be read a first, second and third and final time.

#### 16. Confirming By-Law

Recommendation:

That By-law 2022-43 being a By-law to confirm the proceeding of the Regular Meeting of Council held on June 23, 2022, be read a first, second and third and final time.

#### 17. Adjournment

Recommendation:

That the Council of the Municipality of West Elgin hereby adjourn at \_\_\_\_\_\_ to meet again at 9:30 a.m. on July 21, 2022 or at the call of the Chair.



### Municipality of West Elgin

### WEST ELGIN LANDFILL SITE UPDATE



West Elgin

June 23, 2022

# **Presentation Outline**

- **Topic 1:** 2021 Environmental Monitoring Program
- **Topic 2:** 2021 Design and Operations Overview
- **Topic 3:** 2022 Spring Update
- **Topic 4:** Future Considerations & Recommendations

# **Topic 1:** 2021 Environmental Monitoring Program



## West Elgin Landfill Location



### West Elgin Landfill Site Plan



### **2021 Environmental Monitoring Program and Design & Operations**

- Groundwater Flow Measurement, Collection of Methane Level Readings, and Groundwater Sampling (Semi-Annual)
- Operations Inspection (Semi-Annual)
- Semi-Annual Interim Reporting (to the Municipality only) and Annual Reporting to the MECP

## Groundwater Levels and Flow Direction



### **Groundwater Flow Direction- 2021 Spring**



### **Groundwater Flow Direction – 2021 Fall**



### **Methane Vapour Readings**





### **2021 Methane Vapour Readings**

- Highest methane readings typically in wells located within landfill material (MW2/ MW2-R and MW2D) or near landfilling operations (MW4 and MW5-R)
- In 2021, the highest readings were at MW2-R and MW2D as per usual. The rest of the results were below the detection limit of 0.5%.
- No concern for gas building in the former onsite attendant trailer or the sea container (wells in the vicinity are < 0.5%).</li>

### **2021 Methane Vapour Readings**



### **Groundwater Quality Assessment**



### **2021 Groundwater Quality Assessment**

- Leachate Indicator Parameters (LIPs) include: alkalinity, arsenic, chloride, DOC, iron, and sodium
- Also consider: ammonia, Organic N, colour, hardness, TDS, turbidity, fluoride, nitrate, nitrite, manganese and zinc, Volatile Organic Carbons (VOCs)
- Chloride is the most mobile and conservative leachate indicator parameter

### **2021 Groundwater Quality** Trigger Mechanism and Contingency Plan

 Tier 1 Alert – 3 consecutive exceedances of 75% RUL at a trigger well of the LIPs



 Tier 2 Assessment – consider trends in LIPs. Confirm increasing trends in concentrations. Confirm likely landfill-related.

✓===
$\mathbf{X}$

**3. Tier 3 Confirmation** – monthly samples for 3 months



 Tier 4 Compliance – communication between MECP and Municipality within 6 months to assess if remedial measures are required.

### **2021 Groundwater Quality** Tier 1 – Trigger or Boundary Wells



# 2021 Groundwater Quality Tier 1 - Trigger Alerts

- Background Well Concentration (MW14-R)
- Ontario Drinking Water Quality Standards (ODWQS)
- Reasonable Use Guideline/ Limits
- 75%
- Three Consecutive Occurrences

## **2021 Groundwater Quality Results**

- All RULs were calculated using historical data from background monitoring well
- Tier 1 Alerts:
  - MW1 for alkalinity;
  - MW9 for DOC;
  - MW19-R for iron;
  - all other trigger/ boundary wells were in compliance.

### 2021 Groundwater Quality Tier 2 Assessment – MW1 (Alkalinity)

### Tier 2 Assessment Discussion for MW1

- Results are less than 100% of the RUL
- Alkalinity is the measure of the water's ability to neutralize acid (versus pH that measures how acidic or basic the water is)
- Alkalinity results show a decreasing trend, however, LIPs chloride and sodium are slightly increasing (still below 75% of the RUL)
- No Tier 3 Confirmation required at this time.

### **2021 Groundwater Quality** MW1- Alkalinity



### 2021 Groundwater Quality Tier 2 Assessment – MW9 (DOC)

### Tier 2 Assessment Discussion for MW9

- Results are still less than 100% of the RUL
- DOC measures organic matter in the dissolved phase and does not solely represent leachate impacts
- No definite trend is noted in the LIP concentrations over time.
- No Tier 3 Confirmation required at this time.

### **2021 Groundwater Quality** MW9 – DOC and Other LIPs



### 2021 Groundwater Quality Tier 2 Assessment – MW19-R (Iron)

Tier 2 Assessment Discussion for MW19-R

- This alert was first noted in 2019 and resulted in Tier 3 Monitoring.
- Iron on its own are not fully attributed to landfill activities, but may be a sign of localized impacts (i.e. due to metals storage)
- No definite trend is noted in the LIP concentrations over time.

### **2021 Groundwater Quality** MW19-R- Iron



### **2021 Groundwater Quality** MW19-R- Chloride



### **Topic 1 Summary & Recommendations**

- Overall groundwater flow continues to be to the east (towards CAZ); however, in Fall 2021, a mound at MW9 indicates a component of flow to the north.
- No methane concerns.
- Tier 1 Alerts at MW1, MW9, and MW19-R initiated Tier 2 Discussions that indicate no further action required.
- Submitted recommendation to identify LIPs as primary or secondary indicators and only trigger alerts when more than one parameter demonstrates an increasing trend beyond the trigger limit.

# Topic 2: 2021 Design and Operations





## 2016 Landfill Unmanned Aerial Vehicle (UAV) Survey

• In September 2016, BluMetric completed a UAV survey of the landfill



## 2021 Landfill Capacity



Factors used to determine capacity:

- annual waste input rate (213 metric tonnes down from 430 metric tonnes in 2020)
- a compaction density of 0.5 tonne/m<sup>3</sup>
- waste to cover ratio of 4:1
- estimated quantity of in-place waste
- a projected annual population (i.e. waste) growth rate of 0.5% over the next 25 years

# The estimated life of the landfill is <u>36 years</u> (that is, until December 2056).
### **2021 - Waste Collection**

Waste Source	Measured/Tracked	Weight (Metric Tonnes)
Municipal-Wide Curbside	Measured (Scale)	1,060
Waste Transfer Site	Tracked Acceptance/ Assumed Weights	215
Large Item Collection (from Rodney & West Lorne)	Tracked Acceptance/ Assumed Weights	0 (Cancelled due to Covid)
TOTAL		1274

In 2021, the total recorded amount of waste brought to the landfill has decreased as material is diverted to Green Lane Landfill.



### **2021 - Waste Diversion**

Source	Measured/Tracked	Weight (Metric Tonnes)
Municipal-Wide Curbside	Measured (Scale)	260
Waste Transfer Site	Tracked Acceptance/ Assumed Weights	48
Waste Transfer Station (Steel/ Electronics)	Tracked Acceptance/ Assumed Weights	86

In total, the Municipality diverted 394 metric tonnes of recyclable material from the landfill in 2021 (plus organic material that is not weighed).

### **Topic 2 Summary and Recommendations**

- Estimated Landfill Life = 36 years
- Estimated Remaining Site Capacity = 21,216m<sup>3</sup>
- A UAV survey should be completed in 2022 (the recommended frequency is every 5 years, and the last survey was done in 2016).



# Topic 3: 2022 Activities

	A	PR 1 1 2017	
	Ontario	: :	Ministry of the Environment and Climate Change Ministère de l'Environnement et de l'Action en matière de changement climatique
•		AMENDMENT 1	O ENVIRONMENTAL COMPLIANCE APPROVAL NUMBER A051101 Notice No. 1 Issue Date: April 4, 2017
	The Corporation of the 22413 Hoskins Line Post Office Box, No. 4 Rodney, Ontario NOL 2C0	e Municipality of Wes	t Elgin
Site Location:	Rodney Landfill - Wes 911 address - 20385 o Lot B, Concession 7 West Elgin Municipal	st Elgin Landfill n Downie Line ity, County of Elgin	
You are hereby	notified that I have am	ended Approval No. disposal/transfer site	A051101 issued on September 11, 2015 for the within a total site area of 6.6 hectares. as follows:

"waste electrical and electronic equipment " has the same meaning as in Ontario Regulation 393/04 (was Electrical and Electronic Equipment) made under the Waste Diversion Act.

### 2022 RPA Survey

Produces a geodetically controlled 3D model of the landfill ground surface using temporary ground targets by GPS Real-Time Kinematic (RTK-GPS).





### 2022 Survey – Air Photo



### **2022 Survey- Cross Sections**





### **2022 Survey – Volumetrics**



- estimated remaining capacity is 24,939 m<sup>3</sup>
- this is more than we estimated using fill rates.
- estimated life of the landfill is 42 years.

# **2022 Spring Monitoring**

- Spring monitoring completed May 12<sup>th</sup>
- Groundwater flow to the East (no mounding)
- No concerns with methane
- Tier 1 Alert and Tier 2 Assessments for:
  - MW1 Alkalinity, DOC
  - MW2 DOC
  - MW12 DOC
  - MW19-R Iron, DOC

# **2022 Spring Monitoring**

- DOC present in the background well
- DOC is not solely representative of leachate – result of decaying plant matter and fluctuating temperature and precipitation.
- Alkalinity and iron also not solely representative of leachate
- Proposed recommended changes to Trigger Mechanisms and Contingency Plan

### Proposed Changes to Trigger Mechanism and Contingency Plan

- 1. Identify LIPs as either primary (more conservative) and secondary (less conservative).
  - Primary LIPs to include; chloride, arsenic.
  - Secondary LIPS to include; alkalinity, DOC, iron, sodium
- 2. Tier 1 Alert will not be triggered unless two or more LIPs (including at least one primary LIP) meet the required criteria (i.e. the trigger level is exceeded for 3 consecutive sampling events at a trigger well).

# Topic 4: Future Considerations & Recommendations



## Landfill Capacity Reminder

- Estimated Life = 42 years
- Waste Transfer Station can continue indefinitely



### Landfill Closure

- ECA dictates that 3 years prior to closure of landfill you must provide the MECP with a 'Closure Plan'
  - End use of landfill and appearance
  - Roll out to the community
  - Plan for post-closure care



- Design and Operations Report (2006) specifies:
  - End use of landfill is green space area
  - Final cover will consist of 600 mm of compacted clay and 150 mm of seeded topsoil

### **Recommended Trigger Plan Update**

Consult the local Ministry District Office to confirm best steps to update the Plan:

- Defined within 2021 report;
- Stand alone letter; or
- full ECA Amendment Application.



### **Questions?**





### **Municipality of West Elgin**

#### **Minutes**

#### **Council Meeting**

June 9, 2022, 9:30 a.m. West Elgin Community Complex - Hybrid Meeting 160 Main Street West Lorne Electronic Hybrid Meeting

Present: Mayor D. McPhail Deputy Mayor R. Leatham Councillor T. Tellier Councillor A. Cammaert Councillor B. Rowe

Staff Present:M. Badura, CAO/ TreasurerJ. Nethercott, ClerkL. Gosnell, Manager of Operations & Community ServicesJ. Morgan-Beunen, Chief Building OfficialJeff McArthur, Fire ChiefHeather James, Planner

This meeting was held in a hybrid format, with attendance both virtual and in person

#### 1. Call to Order

Mayor Duncan McPhail called the meeting to order at 9:30 a.m.

#### 2. Adoption of Agenda

Resolution No. 2022- 230 Moved: Councillor Rowe Seconded: Councillor Tellier

That West Elgin Council hereby adopts the Agenda as presented.

Carried

#### 3. Disclosure of Pecuniary Interest

No disclosures

#### 4. Court of Revision - Flemming and Axford Municipal Drains

#### Resolution No. 2022- 231 Moved: Councillor Cammaert Seconded: Deputy Mayor Leatham

That Council proceed into Court of Revision pursuant to Section 46 of the *Drainage Act, R.S.O. 1990.* 

#### Carried

#### 5. Delegations

Mayor McPhail welcomed Tom Jeffery, Steph Ouellette and Jackie Van Eard Beatty to Council. Tom Jeffery and Steph Ouellette went through the slide show presentation.

#### 5.1 Four Counties Health Services Foundation Presentation

Mayor McPhail welcomed Tom Jeffery, Steph Ouellette and Jackie Van Eard Beatty to Council. Tom Jeffery and Steph Ouellette went through the slide show presentation.

#### 5.2 Lower Thames Valley Conservation Authority - Memorandum of Understanding

Mayor McPhail welcomed Mark Peacock and Valerie Towsley to Council. Mark Peacock and Valerie Towsley went through the power point presentation.

Council recessed at 10:28 a.m. and reconvened at 10:32 a.m.

#### 8. Staff Reports

- 8.4 Planning
  - 8.4.1 H. James Severance Report on File No. E33-22- 26661 Silver Clay Line

Resolution No. 2022- 232 Moved: Deputy Mayor Leatham Seconded: Councillor Rowe

That West Elgin Council hereby receives the report from Heather James, Planner regarding the severance application, File E33-22 – Comments to Elgin County (Planning Report 2022-21);

And that West Elgin Council hereby recommends approval to the Land Division Committee of the County of Elgin for the severance application, File E33-22, subject to the Lower-Tier Municipal conditions in Appendix Two of this report;

And further that West Elgin Council directs Administration to provide this report as Municipal Comments to the County of Elgin.

#### Carried

8.4.2 H. James, Planner - Severance Application E48-22 - 157and 161 Jane Street – Comments to Elgin County

Resolution No. 2022- 233 Moved: Councillor Tellier Seconded: Deputy Mayor Leatham

That West Elgin Council hereby receives the report from Heather James, Planner regarding the consent application, File E48-22 – Comments to County of Elgin (Planning Report 2022-22);

And that West Elgin Council hereby recommends approval to the Land Division Committee of the County of Elgin for the severance application, File E48-22, subject to the Lower-Tier Municipal conditions in Appendix Two of this report;

And further that West Elgin Council directs Administration to provide this report as Municipal comments to the County of Elgin.

#### 8.4.3 H. James, Planner - Bill 109 Review of Provincial Changes

#### Resolution No. 2022- 234 Moved: Councillor Tellier Seconded: Councillor Rowe

That West Elgin Council hereby receives the report from Heather James regarding Bill 109 Review of Provincial Changes;

And that West Elgin Council hereby directs Administration to complete a review of the Official Plan Amendments, Zoning By-law Amendments and Site Plan Control processes before the additional legislation comes in to effect as of January 1, 2023.

Carried

#### 6. Adoption of Minutes

#### Resolution No. 2022- 235 Moved: Deputy Mayor Leatham Seconded: Councillor Cammaert

That the Minutes of the Council meeting on May 26, 2022 be adopted as circulated and printed.

#### Carried

#### 7. Business Arising from Minutes

None.

#### 8. Staff Reports

#### 8.1 Building

#### 8.1.1 J. Morgan-Beunen, CBO - Building Activity Report May 2022

Resolution No. 2022- 236 Moved: Councillor Rowe Seconded: Councillor Tellier

That West Elgin Council hereby receives the report from Jackie Morgan-Beunen, CBO re: Building Permit Report for May 2022 for information purposes.

- 8.2 Fire
  - 8.2.1 Jeff McArthur, Fire Chief Monthly Report May 2022

Resolution No. 2022- 237 Moved: Councillor Cammaert Seconded: Deputy Mayor Leatham

That West Elgin Council hereby receives the report from Jeff McArthur, Fire Chief re: May Monthly Fire Report for information purposes.

Carried

#### 8.3 Operations & Community Services

8.3.1 L. Gosnell, Manager of Operations & Community Services -Monthly Operations Update

Resolution No. 2022- 238 Moved: Councillor Tellier Seconded: Councillor Cammaert

That West Elgin Council hereby receives the report from Lee Gosnell, Manager of Operations & Community Services, for information purposes.

#### Carried

8.3.2 L. Gosnell, Manager of Operations & Community Services -Dust Suppressant Procedures

Resolution No. 2022- 239 Moved: Councillor Tellier Seconded: Councillor Cammaert

That West Elgin Council hereby receives the report from Lee Gosnell, Manager of Operations & Community Services re: Dust Suppressant Procedures for information purposes.

- 8.5 Clerk's
  - 8.5.1 J. Nethercott, Clerk & Lee Gosnell, Manager of Operations & Community Services Recycle Coach App

Resolution No. 2022- 240 Moved: Councillor Rowe Seconded: Councillor Tellier

That West Elgin Council hereby receives the report from Jana Nethercott, Clerk and Lee Gosnell, Manager of Operations & Community Services re: Recycle Coach App for information purposes.

Carried

#### 8.6 Finance/Administration

8.6.1 M. Badura, CAO/Treasurer & J. Nethercott, Clerk -Administration Monthly Update – April and May 2022

> Resolution No. 2022- 241 Moved: Councillor Rowe Seconded: Councillor Cammaert

That West Elgin Council hereby receives the report from Magda Badura, CAO/Treasurer and Jana Nethercott, Clerk re: Administration Monthly Report for April and May 2022 for information purposes

#### Carried

#### 9. Upcoming Meetings

- Recreation Committee June 15 at 7 pm
- Council June 23 at 9:30 am
- Four Counties Transit July 6 at 8 am
- Council July 21 at 9:30 am
- Tri-County Water Board July 26 at 7 pm

Councillor Tellier stated that the Housing Stability Coalition BBQ on June 15 at 12 noon and the Rodney Agricultural Society meeting is June 14 at 7 pm.

Council recessed at 11:26 a.m. and reconvened at 11:39 a.m.

#### **10.** Committee and Board Report

#### **10.1** Councillor Reports from Committees

Deputy Mayor Leatham stated that the Lower Thames Valley Conservation Authority Executive is busy with hearings.

Councillor Rowe stated that a working group has been struck for the Port Glasgow Dance Hall Anniversary Committee and a meeting is being held on June 10.

#### **10.2** Four Counties Transportation Committee - May 16, 2022 Minutes

Councillor Rowe stated that Four Counties Transit Committee stated that there was a meeting on June 6 to review the draft Request for Proposal for a new bus.

#### 11. Accounts

#### Resolution No. 2022- 242 Moved: Councillor Tellier Seconded: Councillor Rowe

THAT the Mayor and Treasurer are hereby authorized to sign Payment Voucher #6 amounting to \$780,758.54 in settlement of General, Road, Water and Arena Accounts including EFT#5243-5288, online Payments# 925-935, cheque# 25935-25945 and Payroll PP11.

#### Carried

#### 12. Correspondence

- 12.1 District of Muskoka Annual Emergency Exercise Exemption
- 12.2 City of Cambridge Ontario Must Build it Right the First Time
- 12.3 Niagara Region Voluntary Russian Sanction Request
- 12.4 Municipal Engineers Association 2022 MEA Awards Request Nominations
- 12.5 Town of Blue Mountains Voter's List Changes
- 12.6 Shadow Minister for Rural Economic Development & Rural Broadband Strategy - Fair and Robust Funding for Rural Canada

- 12.7 Elgin County Council Highlights May 24, 2022
- 12.8 FCHS Foundation Spring Newsletter

#### 13. Council Inquires/Announcements

13.1 Notice of Motion

None.

#### 13.2 Statements/Inquires by Councillors

Councillor Rowe stated that June 15 is World Elder Abuse Day.

#### 13.3 Matters of Urgency

#### 14. By-Laws

14.1 By-law 2022-27- Flemming Drain

#### Resolution No. 2022- 243 Moved: Councillor Rowe Seconded: Deputy Mayor Leatham

That By-law 2022-27 Being A By-Law to provide for the Flemming Drain in the Municipality of West Elgin, be read a third and final time.

Carried

#### 14.2 By-law 2022-28 - Axford Drain

#### Resolution No. 2022- 244 Moved: Councillor Tellier Seconded: Councillor Cammaert

That By-law 2022-28 Being A By-Law to provide for the Updated Schedules of Assessments Axford Drain in the Municipality of West Elgin, be read for a third and final time.

#### 15. Closed Session

#### Resolution No. 2022- 245 Moved: Councillor Tellier Seconded: Deputy Mayor Leatham

That the Council of the Municipality of West Elgin Council hereby proceeds into Closed Session at 11:53 a.m. under Section 239 2(b) consideration will be given to items that pertain to personal matters about identifiable individual(s) including municipal or local board employee(s)

#### Carried

#### 16. Report from Closed Session

Mayor McPhail reported out at 1:12 p.m.

#### Resolution No. 2022- 246 Moved: Councillor Cammaert Seconded: Councillor Tellier

That West Elgin Council hereby directs staff to proceed with termination of Seasonal Trailer Lease Agreement for the lot(s) identified in the Closed Session Report; and

That West Elgin Council hereby provides direction to staff on other items related to identifiable individuals.

#### Carried

#### 17. Confirming By-Law

Resolution No. 2022- 247 Moved: Councillor Tellier Seconded: Councillor Rowe

That By-law 2022-39 being a By-law to confirm the proceeding of the Regular Meeting of Council held on Jun 9, 2022, be read a first, second and third and final time.

#### 18. Adjournment

Resolution No. 2022- 248 Moved: Councillor Cammaert Seconded: Deputy Mayor Leatham

That the Council of the Municipality of West Elgin hereby adjourn at 1:38 p.m. to meet again at 9:30 a.m. on June 23, 2022 or at the call of the Chair.

Carried

Duncan McPhail, Mayor

Jana Nethercott, Clerk



#### Staff Report

Report To:	Council Meeting
From:	Heather James, Planner
Date:	2022-06-23
Subject:	Severance Application E51-22 – Comments to Elgin County

#### **Recommendation:**

That West Elgin Council hereby receives the report from Heather James, Planner regarding the consent application File E51-22 – Comments to County of Elgin (Planning Report 2022-24);

And that West Elgin Council hereby recommends approval to the Land Division Committee of the County of Elgin for the severance application, File E51-22, subject to the Lower-Tier Municipal conditions in Appendix Two of this report;

And further that West Elgin Council directs Administration to provide this report as Municipal comments to the County of Elgin.

#### Purpose:

The purpose of this Report is to provide Council with recommendations related to authorizing municipal comments to the County of Elgin regarding County of Elgin Severance Application E51-22, as Elgin County is the planning approval authority for severances.

The purpose of the application is to facilitate residential lot creation within the settlement area of Rodney.

#### Background:

Below is background information from the application, in a summary chart:

Application	E51-22
Owner/Applicant	Milosz Podolan
Legal Description	Part of Lot 7 Concession 7, Plan 202 Part of Lot 19, RP 11R-10438 Parts 1 to 3
Civic Address	305 Furnivall Road
Entrance Access	305 Furnivall Road
Water Supply	Severed Parcel – Municipal water; needs to be connected
	Retained Parcel – Connected to municipal water
Sewage Supply	Severed Parcel – Municipal sanitary sewage system; needs to be connected

	Retained Parcel – Municipal sanitary sewage system	
Existing Land Area	2,593.19 square metres (0.64 ac)	
Buildings and/or Structures	Severed Parcel – Accessory building (to be removed;	
	Retained Parcel – Single detached dwelling and detached garage	

Below is the detailed dimensions and land areas of the application, in a chart:

Application	Seve	red Parcel (	Part 1)	Ret	ained Parcel	(Part 2)
	Frontage	Depth	Area	Frontage	Depth	Area
E51-22	14.947 m (49.04 ft)	40.234 m (132.0 ft)	601.37 m <sup>2</sup> (0.15 ac)	19.507 m (64.0 ft)	Irregular 102.108 m (335.0 ft)	1,991.82 m <sup>2</sup> (0.49 ac)

The Public Hearing is scheduled for July 27, 2022, at the Elgin County Land Division Committee Meeting.

Figure One below, depicts the existing parcel of the Podolan Lands.



The severed and retained parcels for E51-22 are shown in a draft survey sketch, attached to this report as Appendix One for reference purposes.

#### Financial Implications:

Application fees were collected in accordance with the Municipality's Fees and Charges By-law, as amended time to time. Cash-in-lieu of parkland fee is required due to the creation of a new lot in a settlement area and has been recommended as a condition of severance.

#### Policies/Legislation:

Planning authorities must have regard to matters of Provincial interest, the criteria of the *Planning Act*, be consistent with the Provincial Policy Statement (PPS) and does not conflict with Provincial Plans. Within the Municipality of West Elgin, they must also make decisions that conform to the County of Elgin Official Plan (CEOP) and Municipality of West Elgin Official Plan (OP) and make decisions that represent good land use planning.

With regard to this proposal involving severances, the Planning Authority is the County of Elgin Land Division Committee, wherein the Municipality provides agency comments to the County of Elgin as part of their decision-making process.

#### PPS:

Lot creation is permitted within the Settlement Areas in accordance with Section 1.1 of the PPS.

The proposal appears to be consistent with the PPS.

#### CEOP:

The subject lands are designated Tier I Settlement Areas and Agricultural Area on Schedule 'A' Land Use in the CEOP. The proposed severed parcel is mostly within Tier I Settlement Areas with a small portion of the parcel within the Agricultural Area. Detailed land use designations are provided within the OP.

Section F10.2 Interpretation of Land Use Designation Boundaries states where the general intent of the document is maintained, minor adjustments to boundaries will not require an amendment to this Plan. The boundaries of the settlement areas identified on Schedule A of this Plan are representative of the boundaries as delineated in the local Official Plans. As a result, local Official Plans should be consulted for accurate settlement area boundaries. A minor adjustment to the Tier I Settlement Areas boundary for Rodney is appropriate for the creation of this lot as the majority of the parcel is within the settlement with a small portion outside in the Agricultural Area designation in order to meet the minimum lot area for the Residential First Density (R1) Zone of the West Elgin Zoning By-law.

New lot creation policies of the CEOP contained under Section E1.2.3.1, has 13 criteria listed and would appear to be achieved with this proposal will be fully serviced, will not affect drainage patterns in the area, and entrance access to the lands from Furnival Road.

Therefore, this proposal appears to conform to the CEOP.

#### OP:

The proposed severed parcel is designated as Residential, as shown on Village of Rodney Land Use and Transportation Plan Schedule 'C' of the OP, as shown on Figure Two, with the yellow and grey colour hatching being the Residential designation.

The proposed severed parcel is also designated Rural Residential, as shown on Rural Area Land Use &



Transportation Plan Schedule 'E' of the OP, as shown on Figure Three, with the yellow colour being the Rural Residential designation. The proposed retained parcel is designated Rural Residential.

The Residential designation permits a variety of residential uses, with single detached dwellings being the predominant dwelling type. The Rural Residential designation permits single detached dwellings only.

Settlement Area Boundaries policies under Section 10.1.2 states the boundaries of settlement areas follow, wherever possible readily definable physical features or lot lines (or half lot lines) and are generally to be considered absolute. The proposed severed parcel is predominately within the Residential designation, with a small portion within the Rural Residential in order to meet the R1 Minimum Lot Frontage requirements.

Lot creation polices under Section 10.4.1 of the OP, allows for severance (consent) applications. The proposed severance application meets the policy of Section 10.4.1.

Therefore, this proposal appears to conform to the OP.



#### Municipality of West Elgin Comprehensive Zoning By-law 2015-36 (ZBL):

The proposed severed parcel is zoned Residential First Density (R1) on Schedule B, Map 2 of the ZBL as denieted in Figure

ZBL, as depicted in Figure Three to the right. The proposed retained parcel is zoned Residential First Density (R1) on Schedule B, Map 2 and Rural Residential (RR) on Schedule A, Map 37 of the ZBL.

The R1 Zone permits a single detached dwelling. The proposed severed parcels meets the R1 Zone provisions. The proposed retained parcel meets the R1 and RR Zone provisions.

Therefore, it would appear that the proposal would comply with the ZBL.

#### Interdepartmental Comments:

The severance application was circulated to municipal staff for comment. The following comments were received:

#### Drainage:

#### Building:

Building Department noted the following:

Shed needs to be removed from proposed severed parcel to be in compliance with R1 Zone

#### Utilities:

Utilities Department noted the following:

- Municipal water service and municipal sanitary service at the street;
- Existing curb stop; one new stub for each lot is required to service the lots

#### Public Works:

Public Works Department noted the following:

- Proposed retained parcel is connected to municipal water and municipal sanitary services through one stub for each service that crosses over the proposed severed parcel;
- Need to disconnect the proposed retained parcel from stub located on proposed severed parcel and install and pay for new stub for both services for proposed retained parcel;
- Entrance permit from County is required



At the time of submission of this report, no other comments or concerns were received from Administration.

#### Summary:

Therefore, it is Planning Staff's opinion that the proposed lot creation consent, would appear to be consistent with the PPS, conforms to the CEOP and conforms to the OP, complies with the ZBL (subject to relief); and that Council recommends to the County of Elgin that the consent be approved, subject to the lower-tier municipal conditions listed in this report.

The County of Elgin, as the Planning Approval Authority, will have to review the application accordingly against the planning documents (PPS, CEOP, OP and ZBL) and obtain comments from the other agencies and members of the public through the public consultation process, as part of their decision-making on the planning application.

Respectfully Submitted,

Heather James, MES (PI.), MCIP, RPP Planner Municipality of West Elgin

#### **Report Approval Details**

Document Title:	Severance Application E51-22 - Comments to Elgin County - 2022- 24-Planning.docx
Attachments:	<ul> <li>Planning Report 2022-24 Appendix One - Draft Survey for Severance.pdf</li> <li>Planning Report 2022-24 Appendix Two - Comments to Elgin County.docx</li> </ul>
Final Approval Date:	Jun 20, 2022

This report and all of its attachments were approved and signed as outlined below:

Jana Nethercott



a constant a set of second and a second s

THE LAND TITLES ACT.	PLAN 11R-
DATE	RECEIVED AND DEPOSITED
	DATE
PRELIMINARY	
ROBERT WOOD ONTARIO LAND SURVEYOR	REPRESENTATIVE FOR THE LAND REGISTRAR FOR THE LAND TITLES DIVISION OF ELGIN (No. 11)
PARTS S	ESSION /PLAN
Lot 7 Co Lot 19 Registere	ncession 7 Part of P.I.N. 35110-0120 ed Plan No. 202
Lot 7 Con Lot 19 Registere	rd Plan No. 202 Port of P.J.N. 35110-0120
Parts 1 and 2 - Comprise All of P.L.N. 35110	-0120.
PLAN OF OF PART OF	SURVEY
LOT 7. CON	CESSION 7
(GEOGRAPHIC TOWNS	SHIP OF ALDBOROLICH)
AND PART OF	
LOT 19, REC	SISTERED
PLAN No. 2	02
(FORMERLY THE VILL	AGE OF RODNEY)
IN THE	
MUNICIPALIT	Y OF
WEST ELGIN	2 - 2
COUNTY OF EL	.GIN A
543210 5 10	15 20 25
SCALE IN METRES	
ARCHIRALD CDA	
ONTARIO LAND S	T & MCKAY LTD. Ż Surveyors
2 NOTES AND LECEND	
DENOTES SURVEY MONUMEN	
202 SIB DENOTES SURVEY MONUMEN 153 CM DENOTES STANDARD IRON E CM DENOTES CONCRETE MONUM	IT SET JAR IENT
18 DENOTES IRON BAR 180 DENOTES ROUND IRON BAR	R
ACM DENOTES ARCHIBALD, GRAY 1355 DENOTES BRIAN VAUCHAN	McKAY, O.L.S.'S
SU DENOTES SOURCE UNKNOWN P1 DENOTES PLAN 11R-10438	
DENOTES REGISTERED PLAN	No. 153
SURVEYOR'S CERTICICATE	
I CERTIFY THAT :	
1) THIS SURVEY AND PLAN ARE CORR SURVEYS ACT, THE SURVEYORS ACT A	ECT AND IN ACCORDANCE WITH THE
2) THE SURVEY WAS COMPLETED ON "	THE ? DAY OF ?. 2022
PRELIN	1 I N A R Y
DATE	
	ONTARIO LAND SURVEYOR
	HIBALD, GRAY & MCKAY LTD.
PLAN • SURVEY • ENGINEER	E 519-685-5300 FAX 519-685-5303
N BY: NORTON DIGITAL FILE: AL2201 RI	PLAN No:
DATE: APR 12 2022 FILE No- AL-07-07	4-Z-8491-2

#### Planning Report 2022-22: Appendix Two

#### **Consent Application E51-22 – West Elgin Conditions**

Consent Application E51-22 Conditions:

- 1. That the Applicant meet all the requirements, financial and otherwise of the Municipality, to the satisfaction and clearance of the Municipality.
- 2. That the Applicant provides a description of the lands to be severed which can be registered in the Land Registry Office, to the satisfaction and clearance of the Municipality.
- 3. That the Applicant's Solicitor provides an undertaking to the Municipality, to provide a copy of the registered deed for the severed parcel once the transaction has occurred to the Municipality.
- 4. That the Applicant shall make payment of cash-in-lieu of applicable parkland dedication pursuant to Section 51.1 of the *Planning Act*, to the satisfaction and clearance of the Municipality.
- 5. That the Applicant disconnects the retained parcel from the municipal water service and municipal sanitary service located on the proposed severed parcel, to the satisfaction and clearance of the Municipality.
- 6. That the Applicant pays the municipal water service connection fee and the municipal sanitary service connection fee for the retained parcel and connects the retained parcel to the services, to the satisfaction and clearance of the Municipality.
- 7. That prior the final approval of the County, the County is advised in writing by the Municipality how the above-noted conditions have been satisfied.
- 8. That all conditions noted above shall be fulfilled within two years of the Notice of Decision, so that the County of Elgin is authorized to issue the Certificate of Consent pursuant to Section 53(42) of the *Planning Act*.



Report To:	Council Meeting
From:	Heather James, Planner
Date:	2022-06-23
Subject:	Service Agreement/Memorandum of Understanding for Land Use Planning Service Delivery – Lower Thames Valley Conservation Authority

#### **Recommendation:**

That West Elgin Council hereby receives the report from Heather James regarding Service Agreement/Memorandum of Understanding for Land Use Planning – Lower Thames Conservation Authority (LTVCA);

That West Elgin Council hereby approves the Service Agreement/Memorandum of Understanding for Land Use Planning – Lower Thames Conservation Authority, in accordance with the attached agreement;

That the CAO/Treasurer be authorized to sign the agreement;

That the Fees and Charges By-law be amended as related to planning fees, as set out in the attached agreement;

AND that Staff be directed to implement the agreement by adding the additional LTVCA fee to planning applications as of July 1, 2022.

#### Purpose:

To provide Council with the Service Agreement/Memorandum of Understanding for Land Use Planning Service Delivery with the Lower Thames Valley Conservation Authority and provide Council with information on the requirement for such agreement.

#### Background:

A review of the *Conservation Authorities Act* (CA Act) was initiated in 2015 by the Ministry of Natural Resources and Forestry (MNRF). The objective of the review was to identify opportunities to improve the legislative, regulatory, and policy framework governing the creation, operation, and activities of conservation authorities. Following extensive consultation, the Province of Ontario introduced the *Building Better Communities and Conserving Watersheds Act*, 2017 (Bill 139), which received Royal Assent on December 12, 2017.

1
# Financial Implications:

The LTVCA fees will be added to the planning applications as an additional expense. The Municipality will collect the fee on behalf of the CA. The Treasury Department will then remit the collected fees to the LTVCA.

# **Policies/Legislation:**

Bill 139 amendments to the CA Act that affected the mandate of conservation authorities included a new "purpose" section, minor adjustments to the "objects" and "power" sections, and new provisions addressing the following three categories of required and permitted programs and services:

1. Mandatory programs and services that are required by regulation.

2. Municipal programs and services that the authority agrees to provide on behalf of municipalities situated in whole or in part within its area of jurisdiction under a Memorandum of Understanding (MOU).

3. Other programs and services that the authority may determine are advisable to further its objectives.

The CA Act was amended further, on June 6, 2019, as part of the More *Homes, More Choice Act* (Bill 108).

Bill 108 retained the three categories of programs and services added by Bill 139 and specifies four areas of mandatory programs and services that may be prescribed by regulation:

1. Programs and services related to the risk of natural hazards.

2. Programs and services related to the conservation and management of lands owned or controlled by the authority, including any interests in land registered on title.

3. Programs and services related to the authority's duties, functions and responsibilities as a source protection authority under the *Clean Water Act*, 2006.

4. Programs and services related to the authority's duties, functions and responsibilities under an Act prescribed by the regulations (e.g., the Planning Act).

Bill 108 made minor changes to the provisions governing municipal programs and services (nonmandatory) that require an MOU or agreement be made available to the public be reviewed at regular intervals, and that the programs and services an authority agrees to provide on behalf of a municipality be provided in accordance with the terms and conditions set out in the MOU or agreement.

Bill 108 added criteria for other programs and services (non-mandatory) that state that a conservation authority may provide, within its area of jurisdiction, such other programs and services it determines are advisable to further its objects. If municipal financing is required, there must be an agreement in accordance with the regulations and with funding determined in accordance with the CA Act and associated laws.

The CA Act was amended again on December 8, 2020, through the *Protect, Support and Recover from COVID-19 Act, 2020* (Bill 229). These amendments make minor revisions to the provisions governing agreements for the delivery of non-mandatory programs and services, including standards and requirements for delivery of the programs and services.

Many of the CA Act provisions have not been proclaimed and are subject to enabling regulations.

# Regulations include:

- Mandatory Program and Service Regulations (O. Reg. 686/21); and
- Transition Plan and Agreements Regulation (O. Reg. 687/21).

# **Comments**

The Municipality of West Elgin is regulated by the Lower Thames Valley Conservation Authority (LTVCA).

As part of the transition period set out in Bill 229, as noted above, the LTVCA has moved from the present municipal levy process to one defined in the associated regulations.

The purpose of the transition period is to provide conservation authorities and municipalities with the time to address changes to the budgeting and levy process based on mandatory programs and services, municipal programs and services, and other programs and services and the need, in some cases, to reach agreements to allow levies to be collected.

Part of the transition period includes developing and finalizing MOU or agreements between CA and member municipalities in accordance with any regulations governing municipal programs and services. These agreements must be completed by January 1, 2024.

Staff have had an opportunity to review the MOU between the CA and the municipality as it pertains to land use planning service delivery (see attached). This agreement only pertains to land use planning, infrastructure and development-related issues.

The following is a summary of the MOU:

- Purpose, Goals, Definitions, Responsibilities, Implementation parameters, Service Delivery Standards, Fees, Terms of the Agreement.
- Outlines the CA's review of functions
- Outlines the various reports and studies requested for *Planning Act* and development applications.
- Provides guidance on who is a decision-maker and who has a commenting role.
- Provides an overview of application timelines and commitments made to the local development industry.

# Conclusion:

Administration has met with LTVCA staff to review the agreement.

It is recommended that Council approve the agreement and authorize staff to commence the addition of the fees to planning applications (minor variance, zoning amendment, etc).

CAs across the province have entered into similar agreements with their partner municipalities.

The LTVCA and the Municipality have a longstanding relationship of plan review activities.

The MOU will be an important tool to help define roles and responsibilities within the context of a

new protocol for land use planning service delivery.

If Councill supports the agreement, it can be signed and sent to the LTVCA.

It should be noted that a second MOU will be presented to Council in the future to deal with nonmandatory services, including stewardship and education.

Respectfully Submitted,

Heather James, MES (PI.), MCIP, RPP Planner Municipality of West Elgin

# **Report Approval Details**

Document Title:	Service Agreement for Land Use Planning Service Delivery Lower Thames - 2022-25-Planning.docx
Attachments:	- West Elgin_Draft MOU_June 6, 2022.pdf
Final Approval Date:	Jun 21, 2022

This report and all of its attachments were approved and signed as outlined below:

Jana Nethercott

DRAFT

# SERVICE AGREEMENT/ Memorandum of Understanding (MOU)

#### BETWEEN

#### The CORPORATION OF THE MUNICIPALITY of WEST ELGIN

(the "Municipality")

AND

#### The LOWER THAMES VALLEY

#### **CONSERVATION AUTHORITY**

(the "Conservation Authority" or "CA")

Date: June\_\_\_\_\_, 2022

Endorsed by all Parties and in effect as of \_\_\_\_\_, 2022

June , 2022 DRAFT for Review and Discussion Page 1

# 1. THE PURPOSE of this agreement is to:

The Conservation Authority and the Municipality have a longstanding relationship of plan review activities. This MOU will be an important tool to help define roles and responsibilities within the context of a new protocol for land use planning service delivery.

The land use planning framework and the regulatory body under which Conservation Authorities operate in the Province has evolved into a significantly more complex system. The policy and regulatory systems have become more complex, with changing legislation, evolving Provincial Plans, with more specific and rigid tests for planning complete communities.

With a significantly evolved planning framework, it is important that an arrangement is in place to assist parties in managing growth and change while protecting the environment and public safety. It is crucial that the relationships between the parties and the roles and responsibilities in implementing the planning and regulatory framework are seamless, integrated and well understood.

This agreement only pertains to land use planning, infrastructure and development related issues. In this regard, the objectives of this MOU include ensuring that:

- each step of the planning review process is complementary, adds value to the decision making process, does not result in service duplication;
- the rigour of review is consistent with the scale and impacts of the project;
- the public and the natural environment is protected and natural heritage features are restored using a systems-based approach; and
- sharing information assists and expedites decision-making.

The purpose of this Memorandum includes:

- Identify the roles and responsibilities of the Parties and record their mutual understanding in planning policy and development matters (*e.g. CA will provide effective and timely plan review and technical clearance support/expertise to assist the Municipality in making decisions on planning documents and site-specific planning applications*);
- Set out the expectations for plan review and technical clearance on matters relating to natural heritage and water resources;
- Streamline the development application review process, municipal plan review system/process where opportunities exist;
- Improve alignment between planning services and conservation authority permitting processes;
- Establish a data and information sharing protocol;
- The MOU describes services in addition to those activities and services which are undertaken by the CA as part of their own legislative mandate or by agreement with others.

This MOU is intended to work in tandem with the legislative and policy framework for planning in the Province of Ontario. It is not intended to conflict with responsibilities that have been assigned to any of the Parties, either by statute, regulation, policy or other instrument. For example, the MOU is not intended to conflict with:

1. Responsibilities assigned to the Municipality in the following:

1.1 The Planning Act; and

1.2 Any MOU between the County of Elgin and the Province of Ontario relating to municipal plan review.

2. Responsibilities assigned to the Conservation Authority as of the signing of this MOU and subject to change, in the following:

2.1 The Conservation Authority Act and associated Regulations.

2.2 The MOU between the Conservation Authority (Conservation Ontario) and the Province of Ontario relating to municipal plan review, input and appeals relating to Natural Hazards (2001).

2.3 Responsibilities assigned to the Conservation Authority by the Municipality through the Planning Act and applicable Delegation By-law i.e., Natural Heritage (Section 2.1) review and input.

- 3. This MOU is not intended to conflict with or preclude any MOU between any municipality, county or other agencies.
- 5. The Parties commit to undertaking the following work as detailed in the body of this MOU and summarized in Schedule 1.

# 2. DEFINITIONS

## "Board"

Means the Board of Directors of the respective CA(s).

# "Interests"

Means the interests of the Party as defined by its approved plans, policies, and programs.

## "Natural Environment"

Means the natural heritage system and the water resource system including natural hazards and stormwater management.

# "Natural Heritage System"

Means the same as the Provincial Policy Statement definition.

# "Parties"

Means the upper- and lower-tier municipalities' planning policy and implementation departments and the Conservation Authority planning and development department.

# "Plan Review"

The review of applications/studies as set out in the *Planning Act* or other relevant legislation; identifying the need for and assessing the adequacy of technical surveys, studies and reports relating to the watershed natural hazards, natural heritage and water policies for natural environment features or functions; and specifying and clearing conditions of approval. It also includes the review of municipal planning documents, such as Official Plans and amendments and may include studies associated with infrastructure development, such as Environmental Assessment Reports.

### "Technical Clearance"

Assessing technical reports submitted by the proponent to determine if the reports satisfy the conditions through a comprehensive study (e.g. master environmental servicing plans, secondary plans, etc.) or plan review process and in order to clear the conditions of a plan of subdivision, severance application or other planning instrument.

# "Technical Review"

Assessing technical reports submitted by the proponents' consultants in terms of applicable and most recent technical guidelines and standards and the approved terms of reference; specifying modifications or additional technical studies required and conditions of acceptance; validating the technical methods used to determine potential environmental impacts; identifying the nature and extent of mitigation measures required; recommending modifications to, or acceptance of, the technical report.

### 3. GUIDING PRINCIPLES

This Memorandum of Understanding is based on the following principles. The parties agree to work collaboratively to:

a. Deliver timely, accurate, effective and customer-focussed planning services;

b. Eliminate unnecessary duplication to maximize the utilization of existing resources and technical expertise and, where possible, coordinate efforts;

c. Ensure the planning and regulatory systems are seamless, integrated, complementary and well understood;

d. Share mapping resources / layers when needed;

e. Continuously improve working relationships and enhance service performance of all Parties;

f. Monitor the performance of this MOU and service delivery; and

g. A data sharing agreement can be undertaken when the need arises. Staff will ensure that data sharing agreements are kept up to date.

#### June, 2022 DRAFT for Review and Discussion Page 5

### 4. MOU Framework

- 4.1 For the purposes of this MOU, planning services have been defined and organized into two categories: 1) Policy Planning; and 2) Development Planning. By organizing the MOU in this manner, it is not intended to limit or define the service delivery method or the service delivery entity within each of the Parties. The MOU is organized in this manner for ease of reading and reference.
- 4.2 The Parties recognize that there may be initiatives, specific studies and technical studies in support of development applications that exhibit components of both policy planning and development planning.
- 4.3 For the purposes of this MOU, Policy Planning includes:
  - a. Provincial Plans, Policies and Initiatives
  - b. County Official Plan and Amendments
  - c. Local Official Plans and Amendments
  - d. Area Specific Plans (Secondary, Outline Plans and related Studies)
  - e. Community Improvement Plans and Incentives
  - f. Special Studies (e.g. watershed/subwatershed studies)
  - g. Guidelines

Section 5 of this MOU provides specific provisions.

- 4.4 For the purposes of this MOU, Development Planning includes:
  - a. Comprehensive Zoning By-laws
  - b. Zoning By-law Amendments
  - c. Plans of Subdivision and Condominium
  - d. Consents
  - e. Minor Variances
  - f. Part Lot Control
  - g. Site Plans

Section 5 of this MOU provides specific provisions.

# 5. LAND USE PLANNING ROLES AND RESPONSIBILITIES

The CA will endeavor to provide timely comments / advice to the Municipality (refer to Schedule 2) on planning matters, and the Municipality will ensure consistency with Provincial Policies and the Official Plan Policies with respect to any planning application. The Municipality and the Conservation Authority agree that the CA will provide comments / advice as to whether planning applications are consistent with the PPS (S. 2.1, 2.2 and S. 3.1) for the following:

- 1. Zoning Bylaw comprehensive reviews and amendments
- 2. Secondary Plans/Outline Plans
- 3. Minor Variance
- 4. Site Plan Control
- 5. Watershed/subwatershed studies
- 6. Guidelines (e.g. Stormwater, etc.)
- 7. Site alteration by-laws

The Conservation Authority will also provide comments assessing the adequacy of technical environmental studies in meeting PPS (S. 2.1, 2.2 and S. 3.1) policy requirements and objectives. The CA will review documents that assess impacts on the natural environment related to:

- significant wetlands, coastal wetlands, local and unevaluated wetlands;
- significant woodlands;
- significant valley lands, valley lands and stream corridors;
- natural hazards (flooding and erosion);
- hazardous sites (unstable soils or bedrock unstable slopes);
- Source Water Protection areas (e.g. SGRA, HVA's, WHPA & IPZ's);
- ground water recharge areas;
- surface water quantity and quality;
- Hydrology and Hydraulic documents and modelling (e.g. LID, SWM Ponds, etc.);
- Impact and mitigation measures related to natural hazards.

The Conservation Authority will also provide comments:

- advising the Municipality of the adequacy of technical environmental studies in relation to the Municipality's Official Plan policy requirements and objectives;
- on the need for technical reports, the adequacy with reference to relevant guidelines/standards, or related conditions of approval, including but not limited to such studies or plans as:
  - Stormwater management
  - Lot grading and drainage
  - Geotechnical
  - Hydrogeological
  - Erosion and Sediment Control
  - Coastal Engineering Studies

- Environmental Impact Studies and related natural heritage impact and mitigation measures
- Fluvial Geomorphology
- Wetland water balance
- report defining features and assess the long-term ecological function and biodiversity of natural heritage systems, identifying opportunities where applicable for restoration or improvements.
- review documents that assess impacts on the natural environment related to:
  - significant wildlife habitat;
  - habitats of threatened and endangered species;
  - Species At Risk;
  - watercourses, fish and aquatic habitat;
  - areas of natural and scientific interest;
  - significant woodlands;
  - significant wetlands, local wetlands and coastal wetlands;
  - significant valleylands;
- to identify, where appropriate, the Fisheries and Oceans Canada self-assessment process pursuant to the federal Fisheries Act and other similar pieces of legislation affecting the interests of the Conservation Authority;
- to assist in the technical aspects of applying alternative development standards as a best management practice for stormwater management purposes (e.g. Low Impact Development (LID projects)) and enhancement of natural heritage features and functions.
- 5.1 The Parties agree that a high degree of policy alignment is important in advancing an integrated and seamless planning system.
- 5.2 Local Official Plans and Amendments
  - 5.2.1 The Local Municipality leads and adopts policy based Local Official Plans and Amendments.
  - 5.2.2 Prior to initiating policy based Official Plans or Official Plan amendments, the Local Municipality will share information on the initiative and seek input from the Conservation Authority.
  - 5.2.3 The Conservation Authority will review and provide comments on policy-based Local Official Plan Amendments as it relates to their interests and mandates.
- 5.3 Area Specific Plans (Secondary Plans and Related Studies)
  - 5.3.1 The Local Municipality will lead and adopt Area Specific Plans for growth areas.
  - 5.3.2 In developing Area Specific Plans, the Local Municipality will engage the Conservation Authority as it relates to their interests and mandates.
  - 5.3.3 The Local Municipality is responsible for undertaking studies in support of Area Specific Plans.

- 5.3.4 The Local Municipality will work collaboratively with the Conservation Authority to identify and scope the necessary studies required for the Area Specific Plans.
- 5.3.5 The Parties agree to work together to develop a Terms of Reference for each study required.
- 5.3.6 That the Terms of Reference will ensure that any Party involved in the review of any study, and where applicable, will provide technical clearance in writing to the Local Municipality in the timelines defined by the Municipality.
- 5.3.7 The Parties agree that Terms of Reference for studies related to Area Specific Plans (e.g. subwatershed studies) must address key policy tests while being sensitive to context. Area Specific Plans for redevelopment areas may require the Parties to scope, modify or waive study requirements to recognize the existing policy framework and built context for these areas.
- 5.3.8 The Parties have a mutual interest in advancing work on Area Specific Plans. In recognition of this mutual interest, the Parties agree to work within the timelines and scope set out in the Terms of Reference under the proviso that all applicable materials have been received within the agreed to Area Specific Plans / Study initiation timelines.

### 5.4 Special Studies

- 5.4.1 From time to time the Parties will engage in special studies (e.g. watershed / subwatershed, geotechnical, flood line studies, Municipal Stormwater/Servicing Master Plans, etc.) related to land use and regulatory matters that affect the Municipality and the Conservation Authority.
- 5.4.2 The Parties will develop a work plan to collaboratively engage in these studies when it has been determined to be of mutual interest.
- 5.5 Attending Meetings
  - 5.5.1 The CA will attend any meetings (council and/or planning meetings) and public consultation meetings when requested by the Municipality.

June , 2022 DRAFT for Review and Discussion Page 9

## 6. ROLES & RESPONSIBILITIES in the PLANNING SYSTEM relating to IMPLEMENTATION PLANNING

- 6.1 All Parties agree that in reviewing and assessing development applications, comments must be scoped based on:
  - 6.1.1 Legislative or Regulatory authority;
  - 6.1.2 Council or Board approved policies and by-laws;
  - 6.1.3 A consideration of the built context; and
  - 6.1.4 Interests that have been identified through pre-consultation, terms of reference, comprehensive complete application requirements, and/or requisite studies.
- 6.2 The Parties agree that it is important to advance an expeditious review of development applications based on Planning Act timelines. In all cases, the Parties will endeavour to provide comments to the approval authority that:
  - 6.2.1 Will enable the approval authority of the particular planning application to make a decision; and
  - 6.2.2 Are in accordance with the timeframes set out in Schedule 2.
- 6.3 The CA will respond to general inquiries from the Municipality and applicants, will participate in informal or formal pre-consultation meetings with applicants and the Municipality (or provide written comments), and provide expert witness support to the Municipality as necessary where the subject lands involve natural hazards, natural heritage or CA regulated lands.
- 6.4 To ensure that the approval authority is in a position to make a decision on the application within the Planning Act timeframes, the Parties agree to share best practices and to examine ways to harmonize policies and approaches related to pre-consultation and complete application requirements.
- 6.5 The Parties agree to monitor and report on service delivery measures based on common goals and metrics, with an annual or semi-annual report as required by the Municipality.

June , 2022 DRAFT for Review and Discussion Page 10

# 7. PLANNING for the NATURAL ENVIRONMENT

- 7.1 The Parties agree that a greater degree of coordination and timeliness between the Municipality and the Conservation Authority is necessary for advancing an integrated and seamless planning system as it relates to the natural environment.
- 7.2 The Parties agree that there is significant opportunity to improve and to clarify roles and responsibilities in planning for the natural environment.
- 7.3 The Parties agree to work collaboratively to advance an integrated and seamless planning model, based on the following principles:
  - a. a high degree of policy alignment is important in advancing an integrated and seamless planning system;
  - b. the rigour of environmental review must match the scale and nature of impacts;
  - c. planning for the environment should not revisit the principle of land use at the sitespecific stage when defined at the policy stage(s);
  - d. more effort needs to be put 'up front' in defining the components of the natural heritage system (refer to the Elgin Natural Heritage Systems Study);
  - e. good information and data lead to good policy;
  - f. eliminate unnecessary duplication;
  - g. optimize the use of staff expertise; and
  - h. seek opportunities for inter-municipal/agency educational workshops.

June , 2022 DRAFT for Review and Discussion Page 11

## 8. DATA and INFORMATION SHARING

- 8.1 The Parties will work together to define a screening map and guidelines to assist the Municipality in determining when an application will be circulated for review.
- 8.2 The Parties agree that data sharing, data modelling and GIS are important to service efficiencies and will establish and/or participate on a working group to advance an open data approach among the Parties, provided that the data sources are not restricted under third party licensing.

June , 2022 DRAFT for Review and Discussion Page 12

### 9. DISPUTE RESOLUTION

- 9.1 The LTVCA will have regard for previous comments provided by LTVCA staff. Any change in comments based on updated legislation or new information or other matters will be discussed with the Municipality in advance of any formal correspondence being sent out to the Municipality.
- 9.2 Where a dispute arises between two or more Parties' staff pertaining to service matters undertaken in sections 5, 6 or 7 above, the Parties agree that the staff will implement dispute resolution practices utilizing the following principles:
  - a. Agree to a fair process for mediating issues;
  - b. Utilize the services of a neutral facilitator, if required;
  - c. Discuss the impasse item and avoid blame;
  - d. Accept responsibility;
  - e. Identify common agreement / ground;
  - f. Identify all options to resolve;
  - g. Select best option.
- 9.3 The Municipality or the Conservation Authority may recommend that a third party consultant be engaged to undertake any particular review where special expertise is required, or the authority has a conflict of interest or where it is otherwise mutually agreed that it would be in the best interest of the planning process.

### 10. DURATION AND FORMAL REVIEW

- 10.1 This MOU shall come into effect on the date of the last party to sign this MOU and shall remain in effect until such time as it may be replaced by an updated MOU resulting from a mandatory review that will regularly take place no more than five (5) years from the effective date of this MOU.
- 10.2 This MOU may be reviewed at any time before the mandatory review if agreed to by the Parties, particularly when Provincial legislation, CA Act Regulations or plans have been amended.
- 10.3 The mandatory review shall be overseen by the Parties' CAOs with any final recommended changes being subject to full agreement by all Parties.

### 11. GENERAL

- a) The CA will respond to general inquiries from the Municipality and applicants, participate in informal or formal pre-consultation meetings with applicants and the Municipality (or provide written comments), and provide expert witness support to the Municipality as necessary where the subject lands involve natural hazards or CA regulated lands.
- b) Nothing in the agreement precludes the Conservation Authority from commenting to the Municipality, and implementing their regulatory responsibilities, as they would normally exercise their rights under the *Planning Act*, the *Conservation Authority Act* (as amended), *Environmental Assessment Act*, recommendations from the Provincial Flood Advisors Report, delegated responsibilities or other applicable legislation.
- c) Nothing in this agreement precludes the Municipality from exercising responsibility under the *Municipal Act, the Planning Act,* the County Official Plan, the Municipal Official Plan or any other statutory requirement.
- d) Nothing in this agreement precludes the parties from respectfully disagreeing with comments provided by the other party.
- e) Where the Conservation Authority is in conflict between legislated responsibilities and the responsibilities of this agreement, the Municipality may seek third party opinions. This agreement would not prohibit the Municipality seeking third party opinions at any time or for any other matters.
- f) The Conservation Authority and the Municipality will endeavor to have open communication on activities or programs which may impact each other's mandates or responsibilities – e.g. the Municipality proposing to amend general by-laws; the CA undertaking work for the province to identify natural features.

### **12.** TERMS OF THE AGREEMENT

- a) The Municipality and the Conservation Authority agree that:
  - The term of this Agreement shall be for a period of five (5) years from the date of execution by the Municipality and the Agreement shall be automatically extended for an additional five (5) year term, on the same terms and conditions as contained herein at the discretion of the Municipality and the Conservation Authority, until terminated by any of the parties.
  - The Municipality and the Conservation Authority will review this Agreement, to consider changes in programs of the parties or changes in Provincial policies, at least six months prior to the expiry of each five (5) year term. The Conservation Authority's CAO or Planning Department will monitor the agreement and its expiry;
- b) Any party may terminate this Agreement at any time upon delivering six (6) months written notice of termination, by registered mail, to all of the parties, which notice shall be deemed to be received on the third business day from the date of mailing.
- c) Any notice to be given pursuant to this Agreement shall be delivered to the parties at the following address:

Municipality of West Elgin 22413 Hoskins Line Rodney, ON NOL 2CO Attention: <u>Mayor</u>

Lower Thames Valley Conservation Authority

100 Thames Street

Chatham, ON N7L 2Y8

Attention: CAO / Secretary-Treasurer

### 13. IMPLEMENTATION

The Municipality and the Conservation Authority agree:

- That the Municipality would be responsible for submitting meeting minutes/records of outcomes of pre-consultation meetings.
- The Municipality will establish a mechanism to determine complete application requirements as outlined in the County and Municipal Official Plans and to determine the technical checklist required for these studies. Refer to the technical checklist included in Schedule 1.
- That fees for planning services will be collected by the Municipality and will be remitted to the CA on a quarterly basis as outlined in Section 15.

June , 2022 DRAFT for Review and Discussion Page  $17\,$ 

### 14. SERVICE DELIVERY STANDARDS

- a) The Municipality shall set timeframes for responding to planning document amendments and development applications in keeping with the requirements of legislated timelines and included in Schedule 2.
- b) Where an application is complex (requiring more than 3.5 hours of staff review/administration time), a pre-consultation meeting between the Municipality, respective Conservation Authority and the applicant and their agents may take place.

### 15. CONSERVATION AUTHORITY FEES

All parties of this MOU concur that the screening of applications is desirable. This process will ensure that only the appropriate applications are circulated to the Conservation Authority. Although this MOU does not contain specific provisions for screening, both the Municipality and the CA are committed to this end to ensure the best possible service.

### **Collection of Fees**

The Conservation Authorities Act provides the legislative basis to allow conservation authorities in Ontario to charge fees for services approved by the Minister (*Policies and Procedures for the Charging of Conservation Authority Fees*). Section 21 (m.1) of the Act, allows for the collection of fees for planning and development related activities, such as permitting, plan review and public and legal inquiries.

The LTVCA's fees are based on the following: partial user pay principle; adequate consultation and notification; and opportunity or right to an appeal.

For the review and provisions of comments for all planning applications, a fee will be assessed by the CA as outlined in Schedule 3. This fee schedule may be changed from time to time (with approval of the LTVCA Board of Directors) without the need to amend the agreement.

The Municipality will collect the fee on behalf of the conservation authority at the time an application is submitted. Fees collected from planning submissions will be tracked by both the Municipality and the CA, with the Municipality to remit the collected fees quarterly.

### Appeal

An applicant, proponent, or developer has the right to appeal should there be any dissatisfaction with the prescribed fees. Any appeal shall be heard by the LTVCA's CAO/Secretary-Treasurer, with subsequent appeal to the Board of Directors.

### Monitoring

The fees will be assessed on an annual basis by the LTVCA Board of Directors to evaluate their effectiveness and fairness. This document may be amended by mutual agreement from time to time, to reflect changes in programs, funding and personnel for both agencies, or changes to the CA Act or provincial policy.

### 16. List of Schedules to the MOU

Schedule 1: Summary of MOU Parties' Commitments/Undertakings 2022 to 2027

Schedule 2: Development Application review timelines

Schedule 3: LTVCA Planning Fee Schedule

THE MUNICIPALITY	THE LOWER THAMES VALLEY
Of WEST ELGIN	CONSERVATION AUTHORITY
CAO / Clerk-Treasurer	CAO / Secretary-Treasurer
_Magda Badura	Mark Peacock, P. Eng.
Chief Administrative Officer	CAO / Secretary-Treasurer
Date:	Date:

June , 2022 DRAFT for Review and Discussion Page 20

# **SCHEDULE 1**

### SUMMARY OF MOU PARTIES' COMMITMENTS/UNDERTAKINGS 2022 to 2027 (60 months)

The following provides brief descriptions of the content work and outcomes expected for each undertaking. Upon initiation of each undertaking, further details will be developed and agreed upon by all Parties, taking into account the scope of the proposal related to its size and complexity. Listed requirements will occur at different phases of development (i.e. for plan of subdivision, stormwater management facility design may not be a requirement of a draft plan application, rather as part of the development process).

### **CA-Municipal Technical Checklist Recommendations for Planning Applications**

### **Official Plan Amendments**

- Covering letter, which outlines the proposal, provides contact names and describes all preliminary consultation and submission contents
- Application Fee (refer to CA Fee Schedule)
- Appropriate Plans/Drawings
- Natural Systems Map (natural hazards and natural heritage features with requisite buffers, overlaid with existing site conditions, property boundaries, and proposed development and site alteration)
- Topographic Information.

### Potential technical requirements

- A list of support information and materials for Planning Act applications is typically provided in Official Plans; this list should be referred to for consideration
- Conceptual Channel Crossings Assessment
- Subwatershed Study
- Scoped or Full Comprehensive Environmental Impact and Enhancement Study
- Functional Servicing Plan/Stormwater Management Study
- Floodline Delineation Study/Hydraulics
- Functional Servicing Plan/Stormwater Management Study
- Geotechnical/Slope Stability Study
- Preliminary Grading Plans
- Fluvial Geomorphology Study
- Hydrogeological Assessment
- Conceptual Channel Crossings Assessment
- Low Impact Development Opportunity Assessment, as required by municipal policy
- Scoped or Full Environmental Impact and Enhancement Study
- Water Balance Analysis
- Watercourse Erosion Analysis
- Other reports/studies identified through the checklists or staff consultation.

### A-2: Zoning By-law Amendments

- Covering Letter, which outlines the proposal, provides contact names and describes all preliminary consultation and submission contents
- Application Fee (Refer to Fee Schedule 3)
- Appropriate Plans/Drawings
- Natural Systems Map (natural hazards and natural heritage features with requisite buffers, overlaid with existing site conditions, property boundaries, and proposed development and site alteration)
- Topographic Information.

### **Potential technical requirements**

- Channel Crossings Assessment
- Floodline Delineation Study/Hydraulics
- Functional Servicing Plan
- Geotechnical/Slope Stability Study
- Grading Plans
- Hydrogeological Assessment
- Low Impact Development Opportunity Assessment, as required by municipal policy
- Scoped or Full Environmental Impact and Enhancement Study
- Stormwater Management Study
- Structural Elevations and Construction Details
- Water Balance Analysis
- Watercourse Erosion Analysis
- Other reports/studies identified through the checklists or staff consultation.

### A-3: Plans of Subdivisions

- Covering Letter, which outlines the proposal, provides contact names and describes all preliminary consultation and submission contents
- Application Fee (See Fee Schedule)
- Appropriate Plans/Drawings
- Natural Systems Map (natural hazards and natural heritage features with requisite buffers, overlaid with existing site conditions, property boundaries, and proposed development and site alteration)
- Topographic Information.

### **Potential technical requirements**

- Channel Crossings Assessment
- Erosion and Sediment Control Plans
- Floodline Delineation Study/Hydraulics
- Functional Servicing Plan
- Geotechnical/Slope Stability Study
- Grading Plans
- Hydrogeological Assessment
- Landscaping/Site Rehabilitation Plan

- Low Impact Development Opportunity Assessment, as required by municipal policy
- Scoped or Full Environmental Impact and Enhancement Study
- Stormwater Management Facility Design
- Stormwater Management Study
- Structural Elevations and Construction Details
- Topsoil Stripping Review
- Water Balance Analysis
- Watercourse Erosion Analysis
- Restoration/Compensation Plan for vegetation that has been or will be removed.
- Other reports/studies identified through the checklists or staff consultation.

### A-4: Site Plan Controls

- Covering Letter, which outlines the proposal, provides contact names and describes all preliminary consultation and submission contents
- Application Fee (See Fee Schedule)
- Appropriate Plans/Drawings
- Natural Systems Map (natural hazards and natural heritage features with requisite buffers, overlaid with existing site conditions, property boundaries, and proposed development and site alteration)
- Topographic Information.

# Potential technical requirements

- Channel Crossings Assessment
- Conformity Reports (Greenbelt, Niagara Escarpment, ORM, Rouge Park/Rouge Park North)
- Erosion and Sediment Control Plans
- Floodline Delineation Study/Hydraulics
- Functional Servicing Plan
- Geotechnical/Slope Stability Study
- Grading Plans
- Hydrogeological Assessment
- Landscaping/Site Rehabilitation Plan
- Low Impact Development Opportunity Assessment, as required by municipal policy
- Scoped or Full Environmental Impact and Enhancement Study
- Stormwater Management Facility Design
- Stormwater Management Study
- Structural Elevations and Construction Details
- Topsoil Stripping Review
- Water Balance Analysis
- Watercourse Erosion Analysis
- Other reports/studies identified through the checklists or staff consultation.

### A-5: Consents (Severances) and Minor Variances

- Covering Letter, which outlines the proposal, provides contact names and describes all preliminary consultation and submission contents
- Application Fee (See Fee Schedule)

• Appropriate Plans/Drawings.

### **Potential technical requirements**

- Erosion and Sediment Control Plans
- Floodline Delineation Study/Hydraulics
- Geotechnical/Slope Stability Study
- Grading Plans
- Hydrogeological Assessment
- Landscaping/Site Rehabilitation Plan
- Natural Systems Map (natural hazards and natural heritage features with requisite buffers, overlaid with existing site conditions, property boundaries, and proposed development and site alteration)
- Scoped or Full Environmental Impact and Enhancement Study
- Structural Elevations and Construction Details
- Topographic Information
- Other reports/studies identified through the checklists or staff consultation.

### June , 2022 DRAFT for Review and Discussion Page 24

# **SCHEDULE 2**

### **Non-Statutory Development Application Review Timelines**

The following table is an example, which describes the non-statutory timeframes for development review applications that the parties will aim to achieve, broken down by certain major application types. Municipalities and CA are to negotiate an appropriate timeframe for review of these applications as part of the MOU process. **Note**: should the local Municipality recognize that there is a specific issue that requires additional time, the timelines may be extended.

APPLICATION TYPE	PRE- CONSULTATION	CIRCULATION (for pre-consultation, or after an application is deemed complete, or for any subsequent circulations)	COMMENTS AFTER FIRST CIRCULATION
Site specific	Meeting scheduled	Upper-tier Municipality to	Parties to
County Official	with all parties and	circulate to all parties	provide
Plan	the applicant within	within x-3 business days	comments
amendments	x-21		within X- 21
	calendar days of request <sup>1</sup>		calendar days
Site specific	Same as above	Local Municipality to	Parties to
local Official		circulate to all parties	provide
Plan		within x-3 business days	comments
Amendments			within X-21
			calendar days
Site specific	Same as above	Local Municipality to	Parties to
Zoning By-law		circulate to all parties	provide
Amendments		within x-3 business days	comments
			within X-21
	-		calendar days
Plans of	Same as above	Local Municipality to	Parties to
Subdivision or		circulate to all parties	provide
Condominium		within x-3 business days	comments
			within x-21
			calendar days
			unless the local
			agrees there is a
			specific issue
			unat requires
			additional time
			toresolve

Site Plans	Same as above	Local Municipality to circulate to all parties within x-3 business days	Parties to provide comments within x-14 calendar days unless the local Municipality agrees there is a specific issue that requires additional time to resolve
Consents and Minor Variances		Local Municipality to circulate to all parties within x-3 business days	Parties to provide comments within x-7 calendar days

<sup>&</sup>lt;sup>1</sup>To convene a pre-consultation meeting, the lead agency must have sufficient information from the applicant so that the parties can provide advice.

<sup>\*</sup>Regardless of the above noted review timeline schedule, the CA will endeavour to meet any set timelines the municipality requires in order to meet their mandated Planning Act timelines.

# **SCHEDULE 3**

# LTVCA Planning Fee Schedule

# Board Approved: April 21, 2022

Plan Review Fee Schedule	New LTVCA Planning Fee
	· · · · · · · · · · · · · · · · · · ·
legal / private / realtor inquiries	\$125.00
<ul> <li>clearance letters for subdivision/condominium approval (applies to each phase of subd. requested) (from draft plan to clearance, including SWM review) (where permit fee not required)</li> <li>\$115/lot (max \$10,000 per phase) detailed SWM Review and all other review (outside of regulated area)</li> <li>\$350/lot detailed SWM Review and all other review (within regulated area with each lot receiving a permit) (current fee)</li> </ul>	<ul> <li>a. \$115/lot (max \$10,000 per phase) (outside of regulated area)</li> <li>b. \$350/lot (within regulated area)</li> <li>c. \$1,200 preliminary SWM review</li> </ul>
major OP/ZBLA industrial, commercial, institutional, subdivision, etc.	\$300.00 (no SWM review required)
minor OP/ZBLA single family residence	\$200.00
consent	\$200.00
minor variance	\$115.00
site plan control / approval	\$200.00
OPA / ZBLA combination	\$275.00
consent / minor variance with ZBLA combination	\$250.00
consent with minor variance combination	\$250.00
multiple consent applications on a single application	\$115.00/lot (unregulated) \$350.00/lot (regulated)
input and review of relevant EIS's / EA's and other major studies, proponent driven	\$1,500.00
LTVCA staff appearing as an expert witness at a Committee of Adjustment hearing or Ontario Land Tribunal hearing: a. Acting on behalf of the Municipality	a. no fee charged
b. At the request of the proponent	b. nourly rule



# Staff Report

Subject:	May 2022 Monthly Activity Report
Date:	2022-06-23
From:	Heather James, Planner
Report To:	Council Meeting

# Recommendation:

That West Elgin Council hereby receives the report from Heather James, Planner regarding May 2022 monthly planning activity report for information purposes.

# Purpose:

The purpose of this report is to provide Council with an update on municipal planning activities for the month of April 2022.

# Background:

# Applications

• Three planning applications were received and deemed complete (two consents and one minor variance)

Reports to Council/Public Meetings

- Seven reports were presented to Council; public meetings for four zoning by-law amendments
- One closed session report was presented to Council

Letters

- Two zoning reports for the sale of properties were prepared
- One zoning compliance letter was prepared for the sale of propane exchange tank program

### Meetings

- Three in-person meetings with property owners inquiring about severances and a zoning bylaw amendment
- Three virtual meetings; an update on the West Elgin Official Plan with Dillon Consulting; update on ongoing files, proposed severance and LTVCA meeting for Service Agreement/MOU

# Inquiries

- Twenty-eight inquiries by email for mostly zoning and severances
- Thirteen inquiries by phone for mostly zoning and severances

 Significant time was spent conversing, providing information and following-up with applicants and property owners/interested parties by email and by phone on their questions and concerns

**Reviews/Comments** 

- Reviewed comments from LTVCA on four applications
- Reviewed and provided comments on a potential site plan
- Reviewed severance conditions on several files
- Reviewed conditions for a current draft plan of subdivision

West Elgin Official Plan

• Monthly meeting with Dillon Consulting providing update on Official Plan

# **Report Approval Details**

Document Title:	May 2022 Monthly Activity Report - 2022-26-Planning.docx
Attachments:	
Final Approval Date:	Jun 21, 2022

This report and all of its attachments were approved and signed as outlined below:

Jana Nethercott



# Staff Report

Report To:	Council Meeting
From:	Lee Gosnell, Manager of Operations & Community Services
Date:	2022-06-23
Subject:	West Lorne Sanitary Sewer Study

# Recommendation:

That West Elgin Council hereby receives the report from Lee Gosnell, Manager of Operations & Community Services re: West Lorne Sanitary Sewer Study; And That West Elgin Council approve payment from 'Ontario Invests' monies in the amount of \$21,493.20 plus applicable tax to Spriet Associates of London, Ontario for the West Lorne Sanitary Sewer Study.

# Purpose:

The purpose of this report is to provide West Elgin Council with the final version of West Lorne Sanitary Sewer Study and to allocate Efficiency Grant money to pay for work completed.

# Background:

Due to recent development interest in West Lorne, the Municipality contracted Spriet Associates to undertake a review of the sanitary sewer collection system in 2021. Engineering staff worked closely with OCWA and West Elgin to perform an analysis of sewer capacity and identify areas of future growth. All findings were provided in the 'Final' West Lorne Sanitary Sewer Capacity Study, which was provided to the Municipality earlier this spring, and is attached to this report.

### Financial Implications:

At the time this report was commissioned, staff felt 'Ontario Invests' money would be a good source of funding for this project, as it would be an integral part of future development within West Lorne. While completion of this project continued into the 2022 year, it came in under the estimated budget of \$25,000.00.

# **Report Approval Details**

Document Title:	West Lorne Sanitary Sewer Study - 2022-55-Operations Community Services.docx
Attachments:	- West Lorne Sanitary Sewer Study 2021.pdf
Final Approval Date:	Jun 21, 2022

This report and all of its attachments were approved and signed as outlined below:

Jana Nethercott
## WEST LORNE SANITARY SEWER STUDY 2021

# MUNICIPALITY OF WEST ELGIN





March 2022

March 21, 2022

Lee Gosnell Manager of Operations & Community Services Municipality of West Elgin 22413 Hoskins Line Rodney, Ontario N0L 2C0

Mr. Gosnell:

Re: West Lorne Sanitary Sewer Study 2021 Our Job No. 221081

This study has been prepared in accordance with instructions provided by the Municipality of West Elgin. An analysis of the capacity of the existing sanitary sewer system under existing conditions (population and water usage) as well as long term growth for proposed and anticipated developments was then completed including several potential developments. The following summarizes our findings, provides comments regarding sanitary sewer capacity to accommodate urban growth and provides a future sanitary sewer design.

### SUMMARY OF REPORT

### A. <u>GENERAL</u>

The main purpose of this study was to analyse the existing conditions of the sanitary sewer network in West Lorne and determine if the existing sanitary system has excess capacity to accommodate future urban growth.

We note that this sanitary sewer study included analysis of all existing sanitary sewers within the Town of West Lorne, along <u>both</u> Municipality of West Elgin and Elgin County roadways.

It should be noted that additional sewage contributions from urban growth would not only have an impact on the sanitary sewers, but also on the existing pumping station, treatment plant and sewage lagoon.

Based on our records of the existing sanitary sewer system, we have prepared a plan of the entire sewer system and completed theoretical calculations for each sewer run to compare existing sewage flows to actual sewer capacity. Similarly, we performed calculations to determine required sewer sizing for anticipated sewage flows based on proposed developments and anticipated future residential growth.



#### Α. **GENERAL** (cont'd)

This sanitary sewer study revealed that approximately 84.34 hectares of land is tributary to the existing sanitary sewer system. The existing sanitary sewers located within this study area are of various ages and therefore were constructed to different design standards.

An analysis of the calculated tributary flows and capacities for both existing and future conditions for the above-noted areas was completed as detailed below. The existing sanitary sewers were all deemed to have adequate capacity to meet existing and proposed flows (see Area Plans and Design Sheets in APPENDICES 'A' and 'B').

A desktop study of existing sanitary sewer infrastructure was performed, including review of asbuilt drawings provided by the Municipality, and reference to Spriet Associates design drawings and records. Information regarding the extent of proposed and future developments was provided by Municipality personnel. Similarly, Municipality personnel provided water usage data for the highest users within the Town of West Lorne for our review and inclusion within the design sheets to ensure accurate existing sanitary sewer flows are reflected within our capacity analysis.

Refer to APPENDIX 'A' - Drawings EX1 and EX2, which depicts the existing sanitary sewer system within the Town of West Lorne.

As noted, areas of proposed or future growth within West Lorne were determined in liaison with Municipality personnel and are plotted within the Future Conditions Sanitary Area Plan included in APPENDIX 'B' – Drawings FUT1 and FUT2.

#### Β. **DESIGN CRITERIA**

Determination of the tributary populations and sewer capacities for both existing and future conditions were completed using information gathered from drawings (as-constructed) as well as liaison with Municipality personnel. Refer to the Area Plans and Design Sheets included within APPENDICES 'A' and 'B'.

Flows for the tributary populations were calculated based upon current local standards using computerised software spread sheets. Several factors including tributary population densities and land use (i.e. residential, commercial or industrial) and measured water usage values were considered to accurately calculate sanitary flows within the spread sheets. Tributary populations are outlined on the design sheets. The design review was performed in accordance with current Ministry of Environment, Conservation and Parks (MECP) and local standards.

The predominant land use within the sanitary sewer area under investigation in this study is residential. However, numerous commercial and industrial properties also exist within the study area. Future growth was modelled to incorporate proposed or future residential developments.





### B. <u>DESIGN CRITERIA</u> (cont'd)

Sanitary sewage flows outlined within the study are calculated using the following criteria consistent with local design standards:

### 1. <u>Tributary Population Densities:</u>

Tributary population densities taken in accordance with Official Plan and Zoning Bylaw recommendations.

Residential and Commercial: Population density of 60 persons per gross hectare or 80 persons per net hectare.

Industrial: Population density not less than 115 persons per net hectare.

#### 2. Daily per Capita Sewage Flow:

Daily per capita sewage flows of 350 L, excluding infiltration allowances, for residential areas.

3. Land Use:

The Municipality's Official Land Use plan for ultimate probable land use. The net area shall be taken as the gross hectares less the area occupied by roads, parks, right-of-ways, etc. The net area for residential and commercial lands is taken as 73% of the gross hectares. The net industrial area is taken as 80% of the gross industrial hectares.

4. Capacity Factor:

Residential and Commercial: Ranging from 1.55 for 4.0 hectares of net residential or commercial land to 1.00 for 3,000 net hectares.

Industrial: Ranging from 1.55 for 4.0 hectares of net industrial land to 1.00 for 1,600 hectares of net industrial land.

5. <u>Sewage Flow Allowances:</u>

Industrial and Commercial: Sewage flow allowances for industrial and commercial developments shall not be less than 22,500 litres per gross hectare per day.

6. <u>Peak Sewage Flows:</u>

Residential: Residential peak sewage flows calculated based on the Harmon Formula as noted below:

$$M=1+\frac{14}{4+P^{0.5}}$$

Where, P is the Tributary Population in thousands

M is the Peaking Factor (maximum of 4 where applicable)

Industrial and Commercial: Industrial and Commercial peak sewage flows calculated based on the "Harmon" x 0.8



#### Β. **DESIGN CRITERIA** (cont'd)

#### 7. Infiltration Allowance:

The infiltration allowance for all types of developments shall be taken as 8640 litres per hectare per day or 0.100 litres per hectare per second.

#### 8. Minimum Pipe Diameter:

The minimum size of sanitary sewer is 200mm diameter.

The Manning Formula was used to calculate capacity of existing and proposed sanitary sewer pipes, and a Manning coefficient of friction value of n = 0.013 is generally accepted as standard practice for sewer design. However, based on the age and material of the existing sanitary sewers within the study area, a Manning coefficient of friction of 0.015 is more applicable in this situation when analysing the existing sanitary sewers.

#### C. MINISTRY OF ENVIRONMENT, CONSERVATION AND PARKS (MECP) GUIDELINES

The MECP Guidelines for the Design of Sanitary Sewer Systems includes the following text:

Wherever possible, the design of sanitary sewers should be based on the ultimate sewage flows expected from the tributary area. Tributary areas need not necessarily be restricted to current municipal limits.

For the estimation of future sewage flow rates for municipal sewage collection systems, the designer should make reference to the Official Plan (or Draft Official Plan) of the municipality. Such official plans will contain future population densities and land uses.

Sanitary sewer capacities should be designed for the estimated ultimate tributary population, except where parts of the systems can be readily increased in capacity.

The sewage flows from commercial and institutional establishments vary greatly with the type of water-using facilities present in the development, the population at the facilities, the presence of water metering and the extent of extraneous flows entering the sewers.

Peak sewage flow rates from industrial areas vary greatly with the extent of area development, the types of industries present, the provision of in-plant effluent treatment and recycle/re-use or rate of flow controls, the presence of cooling waters in the discharge and other factors.

All sewers should be designed and constructed to give mean velocities, when flowing full, of not less than 0.6 m/s (2.0 ft/s), based on the Chézy-Manning formula using an 'n' value of 0.013.

Sewers 1200 mm in diameter (NPS-48) or larger should be designed and constructed to give mean velocities, when flowing full, of not less than 0.9 m/s (3.0 ft/s), based on the Chezy-Manning formula using an 'n' value of 0.013.

The velocities in sanitary sewer systems should not be more than 3 m/s (10 ft/s), especially where high grit loads are expected. Higher velocities should be avoided unless special precautions are taken. Where velocities greater than 4.6 m/s (15 ft/s) are attained, special provision should be made to protect against pipe displacement by impact and erosion.



#### D. **EXISTING CONDITIONS**

This sanitary sewer study revealed that approximately 84.34 hectares of land is tributary to the existing sanitary sewer system. The existing sanitary sewers located within this study area are of various ages and therefore were constructed to different design standards.

The existing sanitary sewer system within West Lorne consists of approximately 12,500m of sanitary sewers, ranging in size from 200mm to 450mm diameter. The bulk of these sanitary sewers were constructed in the early 1970's based on the as-constructed drawings prepared for Ontario Water Resources Commission. The existing sanitary sewers are split into (2) distinctive and separate sewer networks, essentially splitting the Town of West Lorne sanitary flows into a northerly and southerly sewer system. Each of these sewer systems outlets their respective flows at the existing underground pump station, located along Marsh Line approximately 220m westerly of the intersection of Marsh Line and Angelo Street. A 450mm diameter trunk sanitary sewer provides outlet from pump station flows southerly with outlet into the existing downstream sewage lagoon treatment system.

The West Lorne Wastewater Treatment Plant and Collection System is operated under the MECP Certificate of Approval ECA # 3-0442-90-938. A brief overview of the West Lorne Wastewater Treatment Plant and Collection System is as follows:

- The West Lorne Wastewater Treatment Plant is comprised of extended aeration, clarification, filtration, disinfection and sludge disposal.
- Collection system including one (1) pumping station and a sanitary sewer system.

Based on the 2020 West Lorne Wastewater Treatment Plant Quarterly Report, the plant is currently at 56% of its rated capacity of 900 m<sup>3</sup>/day (10.42 L/s) based on the 2020 average daily raw flow of 501.44  $m^3$ /day.

#### **OCWA ANNUAL REPORT FLOWS**

Annual OCWA Report	Average	Day Flows	Max Da	y Flows
	m³/d	L/s	m³/day	L/s
2016	466.35	5.40	1452	16.81
2017	496.10	5.74	1512	17.50
2018	634.80	7.35	2427	28.09
2019	509.30	5.89	1998	23.13
2020	473.3	5.48	1414	16.37

engineers & architects 114



#### Ε. **PROPOSED CONDITIONS**

In order to review the existing sanitary sewer system under proposed or future conditions, we included currently proposed or anticipated subdivisions within the "Future" analysis. Currently proposed subdivisions, as noted on Drawings FUT1 and FUT2, are summarized as follows:

- 1. Finney Street Subdivision (A125) – located in the north-westerly portion of West Lorne along the east side of Finney Street with sanitary flows proposed to enter the sanitary system within existing maintenance hole MH SN131 located along Finney Street. The subdivision includes 10 proposed single-family homes with an estimated population of 30.
- 2. Creeks Edge Subdivision (FUT 'A' and FUT 'B') - located in the south-westerly portion of West Lorne along the north side of Marsh Line with sanitary flows proposed to enter the sanitary system within existing maintenance holes SA53 and SA10 located along Marsh Line. The subdivision includes 67 proposed single-family homes with an estimated population of 201.
- Future Town Homes (FUT 'C') located at the west side of the intersection of Ridge 3. Street and Chestnut Street with sanitary flows proposed to enter the sanitary system within existing maintenance hole MH 102. The development was included with 33 town homes proposed with an estimated population of 66.
- Future Residential Development located south of Elm Street and west of Chestnut 4. Street and Mehring Avenue with sanitary flows proposed to enter the sanitary system within existing maintenance hole MH 21. The development was included with 117 single family units with an estimated population of 351.

#### F. LIST OF ATTACHMENTS

#### APPENDIX 'A'

DRAWINGS EX1 – EX2 FIGURE NO. 1	-	Existing Sanitary Sewers Under Existing Demand Existing Sanitary Sewer Design Sheet
APPENDIX 'B'		
DRAWINGS FUT1 – FUT2 FIGURE NO. 2	-	Existing Sanitary Sewers Under Proposed Demand Future Sanitary Sewer Design Sheet
APPENDIX 'C'		
Typical Photos		
APPENDIX 'D'		

Official Plan – Schedule 'D' – Land Use and Transportation Plan FIGURE NO. 3 -FIGURE NO. 4 -Zoning By-Law – Schedule 'C' - West Lorne and Area (Maps 1 - 6)



#### G. SUMMARY AND RECOMMENDATIONS

When comparing APPENDIX 'A' (existing conditions) and APPENDIX 'B' (future conditions) Area Plans and Design Sheets, it was noted that all existing sanitary sewer runs are adequate to convey existing and future flows including the noted future development conditions.

The following chart provides a comparison of existing and future sanitary sewer modelling results:

	Existing Conditions	Future Conditions
Area (ha)	84.34	108.94
Population	1879	2524
Maximum Estimated Flow (L/s)	41.37	55.22
Used Sewer Capacity in Runs MH25 – MH10 (%)	43	54
Used Sewer Capacity in Runs MHSA9 – MHSA1 (%)	49	65

Of specific note are the following:

- In both existing and future scenarios, all existing sanitary sewer runs have adequate capacity to convey estimated flows.
- The downstream sewer runs within the northerly sanitary sewer area (MH25 MH 10) are able to convey approximately 43% and 54% of the estimated existing and future flows, respectively.
- The downstream sewer runs within the combined northerly and southerly sanitary sewer area (MHSA9 – MHSA1 at the lagoon) are able to convey approximately 49% and 65% of the estimated existing and future flows, respectively.

We note that analysis of the existing pump station and Wastewater treatment plant including sewage lagoon treatment system were not included within this Report. As such, monitoring of the condition and capacity of the pump station and sewage lagoon treatment system should continue to be reviewed at designated intervals including the rate of development and proposed development growth in West Lorne.

We acknowledge that this analysis was based on theoretical volumes and measured high water user water records within West Lorne, with ultimate (overall) flow value comparison with flows documented within the OCWA yearly reports. Specific parameters within the modelling were revised to ensure the existing overall flows compared favourably with measured OCWA flows.

We note that modelling results suggests that numerous runs may not experience flow velocities meeting the MECP recommended minimum 0.6 m/s. As such, a sewer flushing program may be warranted within the sewer system at known or documented concern areas.

It may be beneficial to perform video inspection of specific runs of sanitary sewer to confirm existing condition, particularly in areas with known capacity or surcharge concerns.





### H. FURTHER INVESTIGATION

We recommend that this Report be reviewed and revised every 5-10 years based on changes related to sewer infrastructure construction, proposed development, funding, and any reported problem areas.

Respectfully submitted,

SPRIET ASSOCIATES LONDON LIMITED



C. S. Lierman, P.Eng.



# APPENDIX 'A'

# **EXISTING CONDITIONS**

# DRAWINGS EX1 – EX2 – EXISTING SANITARY SEWERS FIGURE NO. 1 – EXISTING SANITARY DESIGN SHEET







#### PROJECT NAME: West Lorne Sanitary Servicing

	Industrial Ir	Pop. Density = nfiltration Rate= Sewage Flow =	60 8640 22500	) people/ha ) litre/ha/day ) litre/ha/day		LOT BASIS SINGLE FAMI COMMERCIAI MULTI FAMIL 1- 2-	LY L / INSTUT Y BACI BE BE	Tional: Helor: Edroom: :droom:	3   8 to 10   1.5   2.5   3	PEOPLE PEOPLE PEOPLE PEOPLE PEOPLE	COMMER	RCIAL / INSTI	UTIONAL: GE FLOW:	300 380	litres/perso litres/perso	on/day on/day		5			DESIGNED BY: CHECKED BY: JOB No.	CSL,JA CSL : 221081	DATE	: March 10, 202	2	
	LOCATION			ARE	A (A)		P	opulatior	ו		S	ewage F	low					SEWE	R DES	IGN			PRO	FILE		
AREA		FROM	ТО	AREA	TOTAL	per	per	No. of	delta	Total	Infilt.	Sewage	Total		SIZE	SLOPE	CAP.	VEL.	LEN.	TIME	DROP FALL IN	INVERT	ELEV.	PEAKING	%	CALC.
No.	STREET	M.H.	M.H.	hectares	hectares	hectares	lot	Lots	рор	Popula.	l/s	l/s	l/s	n	mm	%	l/sec.	m/s	meters	min.	IN M.H. SEWER	2 U.S.	D.S.	FACTOR	CAP.	PIPE
A1	Graham Road	SA110	SA109	1.07	1.07	*	3	6	21.0	21	0.11	0.37	0.48	0.015	200	0.35	16.7	0.532	88.4	2.77	0.309			4.000	2.85%	52.7
A2	Walker Street	SA111	SA109	0.80	0.80		3	8	24.0	24	0.08	0.42	0.50	0.015	200	0.34	16.5	0.524	114.0	3.62	0.388			4.000	3.05%	54.0
<u>A3</u>	Graham Road	SA109	SA108	0.92	2.79	<u></u>	3	8	24.0	<u> </u>	0.09	0.42	1.49	0.015	200	0.35	16.7	0.532	98.5	3.09	0.345			4.000	8.93%	80.8
A4	Graham Road	SA108	ISA107	0.75	3.54	*	3	4	16.0	102	0.08	0.28	1.85	0.015	250	0.35	30.3	0.617		3.01	0.390			4.000	0.10%	07.0
A5 A6	Graham Road	ISA107	ISA34	0.05	4.19		3	6	18.0	120	0.07	0.30	2.60	0.015	250	0.35	30.3	0.617	94.8	2.56	0.332			4.000	8.59%	99.6
A7	Mary Street	<u>SA111</u>	SA112	1.20	1.20		3	6	18.0	18	0.12	0.32	0.44	0.015	200	0.65	22.8	0.725	117.3	2.70	0.762			4.000	1.92%	45.4
A8	Bainard Street	SA122	SA112	0.70	0.70	*	3	4	22.0	22	0.07	0.39	0.46	0.015	200	0.37	172	0 547	68.3	2.08	0.253			4 000	2 66%	513
A9	Mary Street	SA112	SA113	0.69	2.59	*	3	2	9.0	49	0.07	0.16	1.12	0.015	200	0.35	16.7	0.532	91.4	2.87	0.320			4.000	6.71%	72.6
A10	John Street	SA121	SA113	0.50	0.50		3	5	15.0	15	0.05	0.26	0.31	0.015	200	0.35	16.7	0 532	64.9	2.03	0.227			4 000	1.88%	45.1
				0.00	0.50			5	10.0	10	0.00	0.20	0.01	0.010		0.00	10.1	0.002	04.0	2.00	0.221			4.000	1.0070	
A11	John Street	SA119	SA113	1.56	1.56	*	3	6	28.0	28	0.16	0.49	0.65	0.015	200	0.35	16.7	0.532	126.8	3.97	0.444			4.000	3.88%	59.1
A12	Mary Street	<u>SA113</u>	<u>ISA114</u>	0.57	5.22		3	5	15.0	107	0.06	0.26	2.40	0.015	250	0.25	25.6	0.522	95.1	3.04	0.238			4.000	9.39%	103.0
A13	Frederic Street	SA118	SA114	0.71	0.71		3	5	15.0	15	0.07	0.26	0.33	0.015	200	0.40	17.9	0.569	75.6	2.22	2 0.302			4.000	1.87%	45.0
A14	Frederic Street	SA117	SA114	0.68	0.68	*	3	5	18.0	18	0.07	0.32	0.38	0.015	200	0.40	17.9	0.569	103.3	3.03	0.413			4.000	2.15%	47.4
A15	Mary Street	SA114	SA115	0.46	7.07		3	4	12.0	152	0.05	0.21	3.38	0.015	250	0.25	25.6	0.522	97.5	3.12	0.244			4.000	13.20%	117.0
A16	Jane Street	SA116	SA115	1.05	1.05		3	q	27.0	27	011	0.48	0.58	0.015	200	0.50	200	0.636	99.4	2 61	0.497			4 000	2 90%	53.0
A17	Jane Street	SA115	ISA34	0.93	9.05	*	3	6	23.0	202	0.09	0.40	4.46	0.015	250	0.25	25.6	0.522	113.7	3.63	0.284			4.000	17.41%	129.8
A18	Jane Street	SA34	SA33	0.08	14.05		3			322	0.01		7.07	0.015	450	0.12	85.1	0.535	66.1	2.06	0.079			4.000	8.31%	177.1
A19	Jane Street	SA33	SA32	0.47	14.52		3	3	9.0	331	0.05	0.16	7.28	0.015	450	0.12	85.1	0.535	99.1	3.09	0.119			4.000	8.55%	179.0
A124	Finney Street	SN132	SN131	0.16	0.16		3	1	3.0	3	0.02	0.05	0.07	0.015	200	0.29	15.2	0.484	19.0	0.65	0.055			4,000	0.45%	26.4
A125	Finney Street	SN131	SN130	0.13	0.29		3		0.0	3	0.01		0.08	0.015	200	0.47	19.4	0.616	51.6	1.40	0.243			4.000	0.42%	25.7
	Finney Street	SN130	SN129		0.29		3			3	;		0.08	0.015	200	0.35	16.7	0.532	10.0	0.31	0.035			4.000	0.49%	27.2
A117	Finney Street	<u> SN129</u>	<u> SN128</u>	0.21	0.50		3	1	3.0	6	0.02	0.05	0.16	0.015	200	0.5	20.0	0.636	61.8	1.62	2 0.309			4.000	0.78%	32.4
A118	Gilbert Street	SN135	SN128	2.73	2.73		3	5	15.0	15	0.27	0.26	0.54	0.015	200	0.30	15.5	0.492	105.1	3.56	0.315			4.000	3.47%	56.7
A119	Gilbert Street	SN134	SN128	1.18	1.18		3	8	27.0	27	0.12	0.48	0.59	0.015	200	0.30	15.5	0.492	96.0	3.25	0.288	-		4.000	3.83%	58.9
A120	Finney Street	SN128	SN127	0.43	4.84		3	2	6.0	54	0.04	0.11	1.43	0.015	200	0.30	15.5	0.492	102.1	3.46	0.306			4.000	9.27%	82.0
A121	Anne Street	SN133	SN127	1 09	1 09		3	10	30.0	30	0 11	0.53	0.64	0.015	200	0.30	15.5	0.492	96.0	3.25	0.288			4,000	4.12%	60.5
A122	Finney Street	SN127	SA124	0.41	6.34		3	2	6.0	90	0.04	0.11	2.22	0.015	200	0.30	15.5	0.492	106.1	3.59	0.318			4.000	14.33%	96.5
A20	Hughes Street	SA125	SA124	1.07	1.07		3	11	33.0	33	0.11	0.58	0.69	0.015	200	0.35	16.7	0.532	127.1	3.98	0.445			4.000	4.11%	60.4
A21	Hughes Street	SA123	SA124	0.23	0.23		3	2	6.0	6	0.02	0.11	0.13	0.015	200	0.50	20.0	0.636	38.1	1.00	0.191			4.000	0.64%	30.1
A22	Finney Street	SA124	SA32	0.50	8.14		3	3	9.0	139	0.05	0.16	3.24	0.015	250	0.30	28.1	0.571	86.9	2.53	0.261			4.000	11.56%	111.3
Δ122	Jane Street	SA126	SA32	0.07		*	2	+	10 0	10	0.01	033	0.34	0.015	250	0.40	324	0.660	56.6	1 43				4 000	1.05%	45.3
	Easement	SA32	ISA31	0.01	22.73		3	1	19.0	489	)	1 0.00	10.86	0.015	450	0.12	85.1	0.535	115.2	3.59	0.138	-		3.979	12.77%	208.0
			1																							
																										1

# FIGURE 1

	SANITARY			PROJ		ME:	West L	orne Sa	nitary So	ervicing	3																
	Industrial	Pon Density	- 6	) neonle/ha			11 V		2							-					DESI	CNED BY		DATE	March 10, 202	2	
	lindustrial	nfiltration Rate	= 864	) litre/ha/day		COMMERCIA	IL Y L / INSTU	TIONAL:	8 to 10	PEOPLE											CHEC	CKED BY:	CSL,JA CSL				
		Sewage Flow =	= 2250	) litre/ha/day		MULTI FAMIL 1-	Y BAC B	CHELOR: BEDROOM:	1.5 2.5	PEOPLE PEOPLE	COMMER	RCIAL / INSTI	JTIONAL:	300	litres/perso	n/day						JOB No.:	221081				
						2-	BI	EDROOM:	3	PEOPLE	RESIDEN	ITIAL SEWA	GE FLOW:	380	litres/perso	n/day											
	LOCATION			ARE	A (A)		F	Population	n		S	ewage F	low					SEWE	R DES	IGN				PRO	FILE		
AREA		FROM	ТО	AREA	TOTAL	per	per	No. of	delta	Total	Infilt.	Sewage	Total		SIZE	SLOPE	CAP.	VEL.	LEN.	TIME	DROP	FALL IN	INVERT	ELEV.	PEAKING	%	CALC.
No.	STREET	M.H.	M.H.	hectares	hectares	hectares	lot	Lots	рор	Popula.	l/s	l/s	l/s	n	mm	%	l/sec.	m/s	meters	min.	IN M.H.	SEWER	U.S.	D.S.	FACTOR	CAP.	PIPE
A 00	Facement	land	<u><u>S</u>A95</u>	0.17	0.17		2	2	0.0	0	0.02	0.16	0.10	0.015	200	0.50	20.0	0.626	21.2	0.56		0.11			4 000	0.000/	22.0
A23 A24	Easement	SA85	SA86	0.17	0.17		3	3	9.0	9	0.02	0.16	0.10	0.015	200	0.50	20.0	0.636	<u>21.2</u> 58.5	1.53		0.11			4.000	1 75%	43.9
A25	Munroe Street	SA86	SA31	0.47	0.80		3	4	12.0	30	0.05	0.21	0.61	0.015	200	0.47	19.4	0.616	109.1	2.95		0.51			4.000	3.14%	54.6
4.00	Mumma a Otma at	0.4.07	0.4.04	0.40	0.40			4	10.0	40	0.05	0.01	0.00	0.015	200	0.50	200.0		07.0	0.47		0.50			4 000	4.000/	20.0
<u>Α26</u> Δ27	Ridge Street	SA87	SA31	0.49	0.49		3	4	12.0	543	0.05	0.21	0.26	0.015	200	0.53	20.6	0.655	<u>97.2</u> 105.5	2.47		0.52			4.000	1.26%	<u>38.8</u> 215.8
<u> </u>				0.+3	24.01				12.0	040	0.00	0.21	11.30	0.013		0.12	00.1	0.000	105.5	0.20		0.15			0.000	14.0370	210.0
A28	Main Street	SA71	SA30	0.61	0.61		3	6	18.0	18	0.06	0.32	0.38	0.015	200	0.40	17.9	0.569	99.7	2.92		0.40			4.000	2.11%	47.1
Δ20	Main Street	5469	SA70	0.25	0.25		3	2	6.0	6	0.03	0.11	0.13	0.015	200	0.40	17.0	0 569	13.6	1 28		0.17			4 000	0.73%	31.6
A30	Main Street	SA70	SA30	0.20	0.25		3	5	15.0	21	0.05	0.11	0.15	0.015	200	0.40	17.9	0.569	4 <u>3.0</u> 87	2.55		0.17			4.000	2.54%	50.5
A31	Ridge Street	SA30	SA29	0.56	26.53		3	5	15.0	597	0.06	0.26	13.13	0.015	450	0.12	85.1	0.535	95.4	2.97		0.11			3.933	15.44%	223.3
A 2 2	Facament	6404	6402	0.24	0.24	*	2	5	21.0	21	0.02	0.27	0.20	0.015	200	0.42	10 5	0 500	45.7	1 20		0.20			4 000	2 1 2 0/	47.0
<u>A32</u>	Easement	<u>SA84</u> SA83	SA83	0.24	0.24		3	5	21.0	21	0.02	0.00	0.39	0.015	200	1.06	29.1	0.590	45.7	0.89		0.20			4.000	<u> </u>	<u>47.2</u> 39.8
A33	Maple Street	SA82	SA29	1.20	1.44		3	10	30.0	51	0.12	0.53	1.04	0.015	200	0.40	17.9	0.569	110.6	3.24		0.44			4.000	5.83%	68.9
A 0.4	Maula Otra at		0.4.04	4.05	4.05			7	01.0	01	0.11	0.07	0.47	0.045	000		170	0 500	00.0	0.00		0.00			4 000	0.000/	54.0
<u>A34</u> A35	Maple Street	SA80	SA81 SA20	1.05	1.05		3	6	21.0	21	0.11	0.37	0.47	0.015	200	0.40	17.9	0.569	96.6	2.83		0.39			4.000	2.00%	64.5
A36	Ridge Street	SA29	SA28	0.36	30.19		3	3	9.0	696	0.00	0.15	15.23	0.015	450	0.12	85.1	0.535	106.1	3.31		0.13			3.896	17.91%	236.1
									10.0											4.0.4					4.000		40.0
<u>A37</u>	Chestnut Street	SA100	SA101	0.61	0.61		3	6	18.0	18	0.06	0.32	0.38	0.015	200	0.35	16./	0.532	<u>58.8</u>	1.84		0.21			4.000	2.26%	48.3
A30 A39	Ridge Street	ISA101	ISA102	1.02	2.36		3	3	9.0	48	0.10	0.16	1.08	0.015	200	0.35	16.7	0.532	99.1	3.11		0.29			4.000	6.47%	71.6
																										,	
																										!	
																										!	
																										/	
																										,!	
	1	1	1	1	1	1		1	1	1	1	1		1	1	1	1								1 1	. ,	

DATE:	March	10,	2022

#### West Lorne Sanitary Servicing PROJECT NAME:

Industrial Pop. Density = Infiltration Rate= Sewage Flow =

60 people/ha 8640 litre/ha/day 22500 litre/ha/day

LOT BASIS SINGLE FAMILY COMMERCIAL / INSTUTIONAL: MULTI FAMILY BACHELOR: BEDROOM: 1-BEDROOM: 2-

3 PEOPLE 8 to 10 PEOPLE 1.5 PEOPLE 2.5 PEOPLE COMMERCIAL / INSTUTIONAL: 3 PEOPLE RESIDENTIAL SEWAGE FLOW:

300 litres/person/day 380 litres/person/day

	LOCATION			ARE	A (A)		F	Population	า		S	ewage F	low					SEWE	R DES	IGN			PRO	FILE		
AREA		FROM	ТО	ARFA	ΤΟΤΑΙ	per	ner	No of	delta	Total	Infilt	Sewage	Total		SIZE	SI OPE	CAP	VFI	IFN	TIME			FLEV	PEAKING	%	CALC
No.	STREET	мы	мц	hectores	hectores	hoctores	lot	Lote	non	Dopula	1/e			l n l	mm	0/0		m/s	motore	min						
INU.	SINEEI	101.11.	101.11.	TIECIALES	neciales	TIECIALES	101	LOIS	μομ	Fopula.	1/5	1/5	1/5			/0	1/500.	111/5	meters			0.3.	D.3.	FACTOR	CAF.	
Δ40	Wood Street	SA66	SA65	1.63	1.63	*	3	3	13.0	13	0.16	0.23	0.30	0.015	200	0.50	20.0	0.636	69.8	1.83	0.35			4 000	1 96%	45 78
740				1.00	1.00				10.0	10	0.10	0.20	0.00	0.013	200	0.50	20.0	0.000	03.0	1.00	0.00			4.000	1.3070	45.70
A41	William Street	SA68	SA67	0.55	0.55		3	3	9.0	9	0.06	0.16	0.21	0.015	200	0.55	20.9	0.667	57	1.42	0.31			4.000	1.02%	35.81
A42	William Street	SA67	SA65	0.32	0.87		3	2	6.0	15	0.03	0.11	0.35	0.015	200	0.55	20.9	0.667	83.2	2.08	0.46			4.000	1.68%	43.16
							-	4		-		-														
A43	William Street	SN139	SN138	0.95	0.95		3	9	27.0	27	0.10	0.48	0.57	0.015	200	0.35	16.7	0.532	91.4	2.86	0.32			4.000	3.41%	56.35
A44	William Street	SN138	SA65	0.09	1.04		3	0	0.0	27	0.01	0.00	0.58	0.015	200	0.35	16.7	0.532	47.2	1.48	0.17			4.000	3.46%	56.68
A45	Wood Street	SA65	SA62	0.44	3.98		3	3	9.0	64	0.04	0.16	1.52	0.015	200	0.50	20.0	0.636	109.1	2.86	0.55			4.000	7.63%	76.20
A 40	Main Otra at			0.00	0.00				07.0	07	0.00	0.40	0.57	0.045	000	0.05	407	0.500	01.1	0.00	0.00			1 000	0.000/	50.00
A46	Main Street	SA64	SA63	0.92	0.92		<u>3</u>	9	27.0	21	0.09	0.48	0.57	0.015	200	0.35	16.7	0.532	91.4	2.80				4.000	3.39%	56.23
<u>A47</u>	Main Street	SA03	SA02 ISA61	0.55	6.43		<u> </u>	0	27.0	<u>42</u>	0.05	0.20	2.00	0.015	200	0.35	37.2	0.532	01.1	2.10	0.23			4.000	3.29%	116.40
<u>Α40</u> Δ/Q	Main Street	<u> 5461</u>		0.66	7 00	*	<u> </u>	2	16.0	1/0	0.10	0.40	2.30	0.015	300	0.20	37.2	0.527	70 /	2.03	0.10			4.000	8 9/1%	121 31
A50	Main Street	ISA60	ISA59	1.82	8.91	*	3	6	29.0	178	0.07	0.20	4 02	0.015	300	0.20	37.2	0.527	91.4	2.89	0.10			4 000	10.80%	130.21
A51	Main Street	SA59	ISA58	0.50	9.41	*	3	3	12.0	190	0.05	0.21	4.28	0.015	300	0.20	37.2	0.527	92	2.91	0.18			4.000	11.50%	133.32
A52	Munroe Street	SN137	SN136	0.62	0.62	*	3	0	7.0	7	0.06	0.12	0.19	0.015	200	0.44	18.7	0.596	83	2.32	0.37			4.000	0.99%	35.41
A116	Easement	SN136	SA56	0.04	0.66		3	0	0.0	7	0.00	0.00	0.19	0.015	200	0.44	18.7	0.596	17	0.48	0.07			4.000	1.01%	35.69
<u>A53</u>	Easement	<u>SA56</u>	SA56A	0.31	0.97	*	3	5	18.0	25	0.03	0.32	0.54	0.015	200	0.40	17.9	0.569	45.7	1.34	0.18			4.000	3.00%	53.73
<u>A54</u>	Easement	SA56A	SA56B	0.02	0.99		3	0	0.0	25	0.00	0.00	0.54	0.015	200	0.40	17.9	0.569	14.3	0.42	0.06			4.000	3.02%	53.80
<u>A55</u>	Easement	SA56B	SA57	0.13	1.12	*	<u>3</u>	4	12.0	<u> </u>	0.01	0.21	0.76	0.015	200	0.40	17.9	0.569	32.9	0.96	0.13			4.000	4.21%	61.30
A30 A57	Argulo Street	SA37	SA30	0.70	11.02		<u> </u>	3	19.0	250	0.07	0.33	5.71	0.015	200	0.40	27.2	0.509	1015	2.31				4.000	0.00%	1190
A37		3A30	JA92	0.51	11.74		3	4	12.0	200	0.05	0.21	5.71	0.015	300	0.20	<u> 37.2</u>	0.527	101.5	3.21	0.20			4.000	15.54 %	140.52
A58	Maple Street	SA91	SA92	0.26	0.26		3	2	6.0	6	0.03	0.11	0.13	0.015	200	0.60	21.9	0.696	68.3	1 63	0.41			4 000	0.60%	29.39
A59	Aravle Street	SA92	ISA93	0.88	12.88		3	7	21.0	285	0.09	0.37	6.30	0.015	300	0.20	37.2	0.527	103	3.26	0.21			4.000	16.92%	154.09
	.,,,																									
A60	Elm Street	SA94	SA93	0.25	0.25	*	3	2	21.0	21	0.03	0.37	0.39	0.015	200	0.83	25.7	0.819	69	1.40	0.57			4.000	1.53%	41.74
A61	Elm Street	SA93	SA36	0.36	13.49		3	3	9.0	315	0.04	0.16	6.89	0.015	300	0.57	62.9	0.889	98.5	1.85	0.56			4.000	10.96%	130.93
		0.4.5.5	0.4.5.4	0.70	0.70	JL.		4	00.0		0.07	0.05	0.40	0.045	000	0.05	407	0.500	00.5	0.50	0.00			4 0 0 0	0 5 4 0 /	50.40
<u>A62</u>	Graham Road	ISA55	ISA54	0.72	0.72	*	3	4	20.0	20	0.07	0.35	0.42	0.015	200	0.35	16.7	0.532	80.5	2.52	0.28			4.000	2.54%	50.42
A03		5A54	<u>5A30</u>	0.09	1.41		<u> </u>	5	15.0	30	0.07	0.20	0.70	0.015	200	0.35	10.7	0.552	97.5	3.05	0.34			4.000	4.55%	02.00
<b>A</b> 64	Graham Road	SA42	SA41	2.01	2 01		3	Q	27.0	27	0.20	0.48	0.68	0.015	200	0.35	16.7	0.532	98.8	3 10	0.35			4 000	4 05%	60.07
A65	Graham Road	ISA41	ISA40	1 12	3 13	*	3	4	16.0	43	0.20	0.40	1.07	0.015	200	0.35	16.7	0.532	88.4	2 77	0.31			4 000	6 40%	71 34
, 100	<u>Oranam rioda</u>				0.10				10.0		0	0.20				0.00	1	0.002	00.1		0.01			1.000	0.1070	1 110 1
A66	Merhing Avenue	SA105	SA40	0.62	0.62		3	4	12.0	12	0.06	0.21	0.27	0.015	200	0.35	16.7	0.532	91.1	2.85	0.32			4.000	1.63%	42.76
A67	Graham Road	SA40	SA39	0.86	4.61	*	3	2	21.0	76	0.09	0.37	1.80	0.015	200	0.35	16.7	0.532	66.4	2.08	0.23			4.000	10.76%	86.69
A68	Graham Road	SA39	SA38	0.78	5.39		3	4	12.0	88	0.08	0.21	2.09	0.015	200	0.35	16.7	0.532	71	2.22	0.25			4.000	12.49%	91.67
		0.4.0.4	0.4.400	0.11	0.44				0.0		0.04	0.40	0.00	0.045	000	0.05	407	0.500	00.5	0.40	0.04			4 0 0 0	4.040/	00.04
<u>A69</u>	Jessie Street	SA104	ISA103	0.44	0.44		3	3	9.0	<u> </u>	0.04	0.16	0.20	0.015	200	0.35	16.7	0.532	69.5	2.18	0.24			4.000	1.21%	38.21
A70	Jessie Street	SA103	SA38	0.36	0.80		3	3	9.0	10	0.04	0.10	0.40	0.015	200	0.35	10.7	0.532	91.0	2.87	0.32			4.000	2.31%	49.18
ALI		3A30	<u>3A37</u>	0.99	7.10		3	5	15.0	121	0.10	0.20	2.00	0.015	200	0.25	25.0	0.522	93.0	2.99	0.23			4.000	11.1270	109.09
A72	Chestnut Street	SA97	SA98	0.81	0.81	*	3	5	19.0	19	0.08	0.33	0.42	0.015	200	0.40	17.9	0.569	89.5	2 62	0.36			4 000	2 32%	48 80
A73	Chestnut Street	SA98	SA99	0.76	1.57		3	8	24.0	43	0.08	0.42	0.91	0.015	200	0.40	17.9	0.569	92.2	2.70	0.37			4.000	5.11%	65.58
A74	Chestnut Street	SA99	SA37	0.14	1.71		3	1	3.0	46	0.01	0.05	0.98	0.015	200	0.40	17.9	0.569	41.1	1.20	0.16			4.000	5.49%	67.34
A75	Graham Road	SA37	SA36	0.57	9.46	*	3	3	19.0	186	0.06	0.33	4.22	0.015	250	0.25	25.6	0.522	<u>97.8</u>	3.12	0.24			4.000	<u> 16.47%</u>	127.12
<u>A76</u>	Elm Street	<u> SA36</u>	ISA35	0.57	24.93		3	5	15.0	<u>551</u>	0.06	0.26	12.18	0.015	450	0.12	85.1	0.535	88.4	2.75	0.11			3.952	14.32%	217.14
A//	EIM Street	SA35	ISA28	0.76	25.69		3	8	24.0	5/5	0.08	0.42	12.68	0.015	450	0.12	85.1	0.535	89.6	2.79	0.11			3.942	14.90%	220.39
		1	1	1								1	1	1 1		1	1	1			1 1	I		1 1		

DATE: March 10, 2022

DESIGNED BY: CSL,JA CHECKED BY: CSL JOB No. : 221081

PROJECT NAME: West Lorne Sanitary Servicing

Industrial Pop. Density = Infiltration Rate= Sewage Flow =

60 people/ha 8640 litre/ha/day 22500 litre/ha/day LOT BASIS SINGLE FAMILY COMMERCIAL / INSTUTIONAL: MULTI FAMILY BACHELOR: 1- BEDROOM:

BEDROOM:

2-

3 PEOPLE 8 to 10 PEOPLE 1.5 PEOPLE 2.5 PEOPLE 3 PEOPLE RESIDENTIAL SEWAGE FLOW:

AL: 300 litres/person/day OW: 380 litres/person/day

	LOCATION			ARE	A (A)		F	Population	<u>ו</u>		5	Sewage Fl	low					SEWE	R DES	SIGN				PRO	FILE		
AREA		FROM	ТО	AREA	TOTAL	per	per	No. of	delta	Total	Infilt.	Sewage	Total		SIZE	SLOPE	CAP.	VEL.	LEN.	TIME	DROP	FALL IN	INVERT	ELEV.	PEAKING	%	CALC.
No.	STREET	М.Н.	М.Н.	hectares	hectares	hectares	lot	Lots	pop	Popula.	l/s	l/s	l/s	n	mm	%	l/sec.	m/s	meters	min.	IN M.H.	SEWER	U.S.	D.S.	FACTOR	CAP.	PIPE
													-										_			-	
A78	Elm Street	SA28	SA27	0.93	59.17		3	8	24.0	1343	0.09	0.39	29.48	0.015	450	0.12	85.1	0.535	103.9	3.24		0.12			3.714	34.65%	302.43
A79	Elm Street	SA27	SA26	0.88	60.05		3	7	21.0	1364	0.09	0.34	29.91	0.015	450	0.12	85.1	0.535	97.5	3.04		0.12			3.709	35.16%	304.08
A80	Elm Street	SA26	SA25	0.85	60.90		3	6	18.0	1382	0.09	0.29	30.28	0.015	450	0.12	85.1	0.535	100.6	3.14		0.12			3.705	35.61%	305.51
A81	Munroe Street	<u> SA87</u>	SA88	0.34	0.34		3	2	6.0	6	0.03	0.11	0.14	0.015	200	0.35	16.7	0.532	96	3.01		0.34			4.000	0.84%	33.24
A82	Munroe Street	<u> SA88</u>	SA89	0.57	0.91		3	5	15.0	21	0.06	0.26	0.46	0.015	200	0.35	16.7	0.532	105.8	3.32		0.37			4.000	2.76%	52.01
400	Mummon Otwood	0.000	0.00	0.40	0.40				15.0	15	0.04	0.00	0.20	0.015		0.25	10.7	0 5 2 2	60 F	0.40		0.04			4 000	4 0 0 0 /	44.54
<u>A83</u>	Wellington Street	15A90	<u>SA89</u>		0.40		3	2	15.0	10	0.04	0.20	0.30	0.015	200	0.35	10.7	0.532	107.6	2.10		0.24			4.000	1.82%	44.51
A04		3409	JAI 3	0.43	1.74		3	<u> </u>	0.0	42	0.04	0.11	0.91	0.015	300	0.20	51.2	0.527	107.0	3.40		0.22			4.000	2.45%	
A85	Main Street	SA71	SA72	1.08	1.08	*	3	6	31.0	31	0 11	0.55	0.65	0.015	200	0 40	17 9	0 569	101.8	2 98		0.41			4 000	3 66%	57.84
A86	Main Street	ISA72	SA73	0.99	2.07		3	g	27.0	58	0.10	0.33	1.23	0.015	200	0.40	17.9	0.569	99.4	2.00		0.41			4 000	6.87%	73 27
7.00				0.00	2.07						0.10	0.10	1.20	0.010		0.10	17.0	0.000	00.1	2.01		0.10			1.000	0.01 /0	10.21
A87	Main Street	ISA76	SA75	2.56	2.56		3	8	24.0	24	0.26	0.42	0.68	0.015	200	0.40	17.9	0.569	84.1	2.46		0.34			4.000	3.80%	58.65
A88	Main Street	SA75	SA74	1.22	3.78		3	10	30.0	54	0.12	0.53	1.33	0.015	200	0.40	17.9	0.569	118.6	3.48		0.47			4.000	7.43%	75.46
A89	Main Street	SA74	SA73	0.73	4.51		3	6	18.0	72	0.07	0.32	1.72	0.015	200	0.40	17.9	0.569	108.8	3.19		0.44			4.000	9.61%	83.11
A90	Wellington Street	SA73	SA79	0.51	8.83		3	3	9.0	181	0.05	0.16	4.07	0.015	300	0.20	37.2	0.527	89.9	2.84		0.18			4.000	10.92%	130.76
A91	Maple Street	<u> SA80</u>	SA79	0.85	0.85		3	8	24.0	24	0.09	0.42	0.51	0.015	200	1.16	30.4	0.968	103.3	1.78		1.20			4.000	1.67%	43.08
	Manla Ofricat		0.4.70	0.70	0.70				04.0	04	0.07	0.07	0.44	0.045		0.40	47.0	0 500	50.0	4 70		0.04			4 000	0.400/	40.04
A92	Maple Street	ISA//	<u> SA/8</u>		0.70		3	/ 5	21.0	21	0.07	0.37	0.44	0.015	200	0.40	17.9	0.569		1.72		0.24			4.000	2.46%	49.84
A93	Wellington Street	ISA70	SA79	0.57			2	2	15.0	250	0.00	0.20	0.70	0.015	200	0.40	27.2	0.509	14.7	2.19		0.30			4.000	4.20%	146.97
A94		JAN9	<u>3A23</u>	0.52	11.47		5	3	9.0	230	0.05	0.10	5.55	0.015	300	0.20	51.2	0.527		3.40		0.22			4.000	14.09 /0	140.07
A95	Elm Street	SA96	SA95	0 40	0.40		3	2	6.0	6	0.04	0.11	0 15	0.015	200	1 00	28.2	0 899	68	1 26		0.68			4 000	0.52%	27 74
A96	Elm Street	ISA95	ISA25	0.35	0.75		3	2	6.0	12	0.04	0.11	0.29	0.015	200	0.40	17.9	0.569	63.1	1.85		0.25			4.000	1.60%	42.44
	Easement	ISA25	ISA24		73.12		3		0.0	1644	0.00	0.00	36.12	0.015	450	0.12	85.1	0.535	67.5	2.10		0.08			3.650	42.46%	326.37
	Easement	SA24	SA23		73.12		3		0.0	1644	0.00	0.00	36.12	0.015	450	0.12	85.1	0.535	62.8	1.96		0.08			3.650	42.46%	326.37
	Easement	SA23	SA22		73.12		3		0.0	1644	0.00	0.00	36.12	0.015	450	0.12	85.1	0.535	80.6	2.51		0.10			3.650	42.46%	326.37
	Easement	SA22	SA21		73.12		3		0.0	1644	0.00	0.00	36.12	0.015	450	0.12	85.1	0.535	59	1.84		0.07			3.650	42.46%	326.37
	Easement	ISA21	SA20		73.12		3		0.0	1644	0.00	0.00	36.12	0.015	450	0.12	85.1	0.535	72.8	2.27		0.09			3.650	42.46%	326.37
	Easement	ISA20	<u>SA19</u>		73.12		3		0.0	1644	0.00	0.00	36.12	0.015	450	0.12	85.1	0.535	98.5	3.07		0.12			3.650	42.46%	326.37
	Easement	ISA19	ISA18		73.12		3		0.0	1644	0.00	0.00	36.12	0.015	450	0.12	85.1	0.535	66.4	2.07		0.08			3.650	42.46%	326.37
		ISA18	ISA17				3		0.0	1644	0.00	0.00	36.12	0.015	450	0.12	85.1	0.535		2.21		0.09			3.650	42.46%	326.37
	Easement	ISA17	ISA 16				3		0.0	1644	0.00	0.00	30.12	0.015	450	0.12		0.535	70.5	2.38		0.09			3.050	42.40%	320.37
	Easement	ISA 10	ISA 13	+	73 12				0.0	1644			36.12	0.015	450		85.1	0.535	6/ 6			0.09			3.000	42.40%	326.37
	Fasement	ISA14	ISA13	1	73.12		3		0.0	1644			36.12	0.015	450	0.12	85.1	0.535	66 1	2.01		0.00			3 650	42.40 /0	326.37
	Easement	ISA13	ISA12		73.12		3		0.0	1644			36 12	0.015	450	0.12	85.1	0.535	90.7	2.00		0.00			3 650	42 46%	326.37
	Easement	ISA12	ISA11		73.12		3		0.0	1644	0.00	0.00	36.12	0.015	450	0.12	85.1	0.535	91.7	2.86		0.11			3.650	42.46%	326.37
	Easement	ISA11	ISA10		73.12		3		0.0	1644	0.00	0.00	36.12	0.015	450	0.12	85.1	0.535	48.2	1.50		0.06			3.650	42.46%	326.37
		1	1	1	1		-	1		1						1	1		1	1		1			1		

DESIGNED BY: CSL,JA CHECKED BY: CSL JOB No. : 221081 DATE: March 10, 2022

60 people/ha 8640 litre/ha/day 22500 litre/ha/day

LOT BASIS SINGLE FAMILY COMMERCIAL / INSTUTIONAL: MULTI FAMILY BACHELOR: 1-

2-

BEDROOM: BEDROOM:

3 PEOPLE 8 to 10 PEOPLE 1.5 PEOPLE 2.5 PEOPLE COMMERCIAL / INSTUTIONAL:

PROJECT NAME:

300 litres/person/day 3 PEOPLE RESIDENTIAL SEWAGE FLOW: 380 litres/person/day

West Lorne Sanitary Servicing

	LOCATION			ARE	A (A)		P	opulation	<u></u> า		S	Sewage F	low					SEWE	R DESI	GN			PRO	FILE		
AREA		FROM	ТО	AREA		per	per	No. of	delta	Total	Infilt.	Sewage	Total		SIZE	SLOPE	CAP.	VEL.	LEN.	TIME	DROP FALL IN	INVERT	ELEV.	PEAKING	%	CALC.
No	STREET	мц	мц	hectores	hectores	hoctores	lot	Lote	non	Popula	1/e		l/c	n	mm	%		m/s	motors	min		119				
INO.		101.11.	101.11.	Tiectares	Theotares	Tiectares	101	2013	pop		1/3	1/3	1/3	- 11	111111	70	1/300.	11//3	meters			0.0.	D.0.			
Δ07	Graham Road	SA42	SA43	1 28	1 28		3	7	21.0	21	0.13	0.37	0.50	0.015	200	0.35	16.7	0 532	89.30	2.80	0.31			4 000	2 98%	53.5
A98	Graham Road	SA43	SA44	1.20	2 29	*	3	3	58.0	79	0.10	1 02	1.62	0.015	200	0.35	16.7	0.532	89.90	2.00				4 000	9.69%	83.3
A99	Graham Road	SA44	SA45	0.97	3.26		3	4	12.0	91	0.10	0.21	1.02	0.015	200	0.35	16.7	0.532	91 10	2.02	0.32			4 000	11 53%	89.0
A100	Graham Road	SA45	SA47	0.97	4 23		3	4	12.0	103	0.10	0.21	2.24	0.015	200	0.35	16.7	0.532	78.00	2 44	0.02			4 000	13 37%	94.1
A101	Graham Road	SA47	SA48	0.73	4.96	*	3	3	20.0	123	0.07	0.35	2.66	0.015	200	0.35	16.7	0.532	69.50	2.18	0.24			4.000	15.92%	100.4
A102	Graham Road	SA48	SA49	1.21	6.17	*	3	3	19.0	142	0.12	0.33	3.12	0.015	200	0.35	16.7	0.532	105.80	3.32	0.37			4.000	18.64%	106.5
A103	Marsh Line	SA49	SA50	0.32	6.49		3		3.0	145	0.03	0.05	3.20	0.015	250	0.35	30.3	0.617	96.90	2.62	0.34			4.000	10.56%	107.6
A104	Marsh Line	SA50	SA51	0.20	6.69		3	0	0.0	145	0.02	0.00	3.22	0.015	250	0.35	30.3	0.617	99.10	2.68	0.35			4.000	10.63%	107.9
A105	Marsh Line	SA51	SN140	0.13	6.82		3	Ō	0.0	145	0.01	0.00	3.23	0.015	250	0.67	41.9	0.854	66.30	1.29	0.44			4.000	7.71%	95.6
A106	Todd Place	SN144	SN143	0.88	0.88		3	9	27.0	27	0.09	0.48	0.56	0.015	200	0.49	19.8	0.629	76.20	2.02	. 0.37			4.000	2.85%	52.7
A107	Todd Place	SN143	SN142	0.44	1.32		3	5	15.0	42	0.04	0.26	0.87	0.015	200	1.84	38.3	1.220	70.40	0.96	6 1.30			4.000	2.27%	48.4
A108	Angelo Street	end	SN142	0.28	0.28		3	2	6.0	6	0.03	0.11	0.13	0.015	250	0.48	35.5	0.723	27.60	0.64	0.13			4.000	0.38%	30.8
A109	Angelo Street	SN142	SN141	0.59	0.87		3	4	12.0	18	0.06	0.21	0.40	0.015	250	0.48	35.5	0.723	101.70	2.34	0.49			4.000	1.14%	46.7
<u>A110</u>	Todd Place	<u>SN144</u>	<u>SN145</u>	0.77	0.77		3	6	18.0	18	0.08	0.32	0.39	0.015	200	0.47	19.4	0.616	102.30	2.77	0.48			4.000	2.03%	46.4
<u>A111</u>	Todd Place	<u>SN145</u>	<u>SN146</u>	1.11	1.88		3	7	21.0	39	0.11	0.37	0.87	0.015	200	0.48	19.6	0.623	72.70	1.95	0.35			4.000	4.47%	62.3
<u>A112</u>	Todd Place	<u>SN146</u>	<u>SN141</u>	0.64	2.52		3	7	21.0	60	0.06	0.37	1.31	0.015	200	0.36	16.9	0.539	73.80	2.28	0.27			4.000	7.72%	76.5
<u>A113</u>	Angelo Street	<u>SN141</u>	<u>SN140</u>	0.53	3.92		3	4	12.0	90	0.05	0.21	<u>1.98</u>	0.015	250	0.49	35.8	0.730	77.50	1.77	0.38			4.000	<u>5.51%</u>	84.3
<u>A114</u>	Marsh Line	<u>SN140</u>	SA52	0.09	10.83		3	0	0.0	235	0.01	0.00	5.22	0.015	250	0.67	41.9	0.854	30.60	0.60	0.21			4.000	12.45%	114.4
<u>A115</u>	Marsh Line	SA52	<u>SA53</u>	0.19	11.02		3	0	0.0	235	0.02	0.00	<u>5.24</u>	0.015	250	0.68	42.2	0.860	97.20	1.88	0.66			4.000	12.40%	114.3
A116	Marsh Line	<u>SN53</u>	ISA10	0.20	11.22		3	0	0.0	235	0.02	0.00	5.26	0.015	250	0.51	36.6	0.745	97.20	2.1/	0.50			4.000	14.37%	120.8
	Easement	ISA10	P.STA.		84.34		3	0	0.0	1879	0.00	0.00	41.37	0.015	450	0.12	85.1	0.535	9.50	0.30	0.01			3.607	48.64%	343.4
		P.STA.	ISA9		84.34		3	0	0.0	18/9	0.00	0.00	41.37	0.015	450	0.12	85.1	0.535	3.00	0.09	0.00			3.607	48.64%	343.4
	Easement	ISA9			84.34		3		0.0	18/9	0.00		41.37	0.015	450	0.12		0.535		0.34				3.607	48.64%	343.4
	Easement	ISA8	<u>5A7</u>		04.34		3		0.0	10/9	0.00		41.37	0.015	450			0.535		1.90				3.007	48.04%	343.4
	Easement	ISA/	SA0		04.34		<u> </u>		0.0	10/9	0.00		41.37	0.015	450		05.1	0.535						3.007	40.0470	343.4
	Easomont	13A0 19A5	SA5 SA4		9/ 3/		3		0.0	1970	0.00		41.37	0.015	450	0.12	95.1	0.535	104.90	3.21				3.007	40.0470	343.4
	Easement	ISAJ	<u>SA4</u> SA3		8/ 3/		<u> </u>		0.0	1870	0.00		41.37	0.015	450	0.12		0.555	03.60					3.607	40.04 /0	333.6
	Fasement	<u>1974</u>	<u> 543</u>		8/ 3/		<u> </u>		0.0	1870	0.00		<u>41.37</u> <u>/1.37</u>	0.015	450	0.14	88.5	0.570		2.70				3.607	45.05%	338.3
	Fasement				84 34		3		0.0	1879	0.00		41.37	0.015	450	0.10	107.0	0.557	75.60	1 87	0.12			3.607	38 66%	315.1
	Labornon	0/ (2	0/11		04.04		0		0.0	10/0	0.00	0.00	41.07	0.010		0.10	107.0	0.070	10.00	1.07	0.14			0.007	00.0070	010.1
	*	DENOTE	S POPUL	ATION C	ALCULAT	ED BASE	D ON N	MEASUR	ED WA	TER ME	TER RE	CORDS														
		AS SUP	PLIED BY	THE MUN	VICIPALIT	Υ																				
										L																
											ļ										<b>↓</b>					
																					+ $+$ $+$					
																+					+ $+$ $+$					
																					+ $+$ $+$					
																					+ $+$ $+$					
		1	1	1	1	1		I		I				1	1	1	1	1	1	1	1 1 1		1	1		

DATE: March 10, 2022

DESIGNED BY: CSL, JA CHECKED BY: CSL JOB No. : 221081

# APPENDIX 'B'

# **FUTURE CONDITIONS**

# DRAWINGS FUT1 – FUT2 – PROPOSED SANITARY SEWERS

# FIGURE NO. 2 – FUTURE SANITARY DESIGN SHEET







	SANITARY	Y SEWER	DESIGN	SHEET	- FUTURE	E CONDIT	IONS :	2021			PROJ	ECT NA	ME:	West Lo	orne Sa	nitary S	ervicin	g									
	to do a tabait	D. D				LOT BASIS			_															DATE:	March 18, 202	<u>'</u> 2	
	industriai Ir	Pop. Density =	60 8640	people/ha litre/ha/dav		COMMERCIA	ILY (L / INSTU	TIONAL:	3 8 to 10	PEOPLE											CHEC	GNED BY: CKED BY:	CSL,JA CSL				
		Sewage Flow =	22500	litre/ha/day		MULTI FAMIL	Y BAC	HELOR:	1.5	PEOPLE											01120	JOB No. :	221081				
						1- 2-	· B	EDROOM:	2.5	PEOPLE		RCIAL / INST		300 380	litres/perso	on/day on/day											
						2-	. Di		J	FLOFLE	NEGIDEI		3E PEOW.	500	nues/perse	Jiruay											
	LOCATION			ARE	A (A)		F	Populatio	n		S	ewage F	low					SEWE	R DES	IGN				PRO	FILE		
AREA		FROM	TO	AREA	TOTAL	per	per	No. of	delta	Total	Infilt.	Sewage	Total		SIZE	SLOPE	CAP.	VEL.	LEN.	TIME	DROP	FALL IN	INVERT	ELEV.	PEAKING	%	CALC.
No.	STREET	M.H.	M.H.	hectares	hectares	hectares	lot	Lots	рор	Popula.	l/s	l/s	l/s	n	mm	%	l/sec.	m/s	meters	min.	IN M.H.	SEWER	U.S.	D.S.	FACTOR	CAP.	PIPE .
A1	Graham Road	SA110	SA109	1.07	1.07	*	3	6	21.0	21	0.11	0.37	0.48	0.015	200	0.35	16.7	0.532	88.4	2.77		0.309			4.000	2.85%	52.7
<u>^</u>	Wolker Street	000111	SA100	0.00	0.00		2	0	24.0	24	0.00	0.42	0.50	0.015	200	0.24	16.5	0.524	111.0	2 62		0.200			4 000	2 050/	54.0
A3	Graham Road	ISA109	ISA109	0.00	2 79		3	8	24.0	69	0.00	10.42 0.42	1 49	0.015	200	0.34	16.5	0.524	98.5	3.02		0.345			4.000	8.93%	80.8
A4	Graham Road	ISA108	SA107	0.75	3.54	*	3	4	16.0	85	0.08	0.28	1.85	0.015	250	0.35	30.3	0.617	111.3	3.01		0.390			4.000	6.10%	87.6
A5	Graham Road	SA107	SA106	0.65	4.19	*	3	4	17.0	102	0.07	0.30	2.21	0.015	250	0.35	30.3	0.617	99.0	2.67	·	0.347			4.000	7.31%	93.7
A6	Graham Road	SA106	ISA34	0.73	4.92		3	6	18.0	120	0.07	0.32	2.60	0.015	250	0.35	30.3	0.617	94.8	2.56	il	0.332			4.000	8.59%	99.6
Δ7	Mary Street	- - - - - - - - - - - - - -	SA112	1 20	1 20		3	6	18.0	18	0.12	0.32	0.44	0.015	200	0.65	22.8	0 725	1173	2 70		0.762			1 000	1 02%	15.4
<u></u>				1.20	1.20		<u> </u>		10.0	10	0.12	0.52	0.44	0.015	200	0.00	22.0	0.725	117.5	2.10	1	0.702			4.000	1.5270	40.4
A8	Bainard Street	SA122	SA112	0,70	0.70	*	3	4	22.0	22	0.07	0.39	0.46	0.015	200	0.37	17.2	0.547	68.3	2.08		0.253			4.000	2.66%	51.3
A9	Mary Street	SA112	SA113	0.69	2.59	*	3	2	9.0	49	0.07	0.16	1.12	0.015	200	0.35	16.7	0.532	91.4	2.87	·	0.320			4.000	6.71%	72.6
<u></u>	Lohn Street	QA121	CA112	0.50	0.50	<u> </u>	2	<u> </u>	15.0	15	0.05	0.26	0.21	0.015	200	0.35	167	0.522	64.0	2.03		0.227			4 000	1 9 9 0/	45.1
A10		JOA 121	JOATIO	0.50	0.50		<u> </u>		10.0	10	0.05	0.20	0.51	0.015	200	0.35	10.7	0.552	04.9	2.03	1	0.221			4.000	1.00 /0	45.1
A11	John Street	SA119	SA113	1.56	1.56	*	3	6	28.0	28	0.16	0.49	0.65	0.015	200	0.35	16.7	0.532	126.8	3.97	/	0.444			4.000	3.88%	59.1
A12	Mary Street	SA113	SA114	0.57	5.22		3	5	15.0	107	0.06	0.26	2.40	0.015	250	0.25	25.6	0.522	95.1	3.04		0.238			4.000	9.39%	103.0
A12	Erodorio Stroot	0110	SA114	0.71	0.71			<u> </u>	15.0	15		0.26	0.22	0.015	200	0.40	170	0.560	75.6			0 202			4 000	1 070/	45.0
A13		ISATIO	<u>5A114</u>	0.71	0.71		<u> </u>	<u> </u>	15.0	10	0.07	0.20	0.33	0.015	200	0.40	17.9	0.509	75.0	2.22	·	0.302			4.000	1.07.70	40.0
A14	Frederic Street	SA117	SA114	0.68	0.68	*	3	5	18.0	18	0.07	0.32	0.38	0.015	200	0.40	17.9	0.569	103.3	3.03	5	0.413			4.000	2.15%	47.4
A15	Mary Street	SA114	SA115	0.46	7.07		3	4	12.0	152	0.05	0.21	3.38	0.015	250	0.25	25.6	0.522	97.5	3.12	2	0.244			4.000	13.20%	117.0
A10	Lana Ctract	0110	CAAAE	1 05	1 05		<u> </u>	<u> </u>			0 11	0.40	0.50	0.015		0.50	1 20 0	0.626	00.4	2.61		0.407			4 000	2 000/	<u> </u>
A10	Jane Street	SA115	ISA34	0.93	9.05	*	3	6	23.0	202	0.11	0.40	4 46	0.015	250	0.50	$\frac{20.0}{25.6}$	0.030	<u>99.4</u> 113.7	2.01		0.497			4.000	17 41%	129.8
A18	Jane Street	ISA34	ISA33	0.08	14.05		3		20.0	322	0.00		7.07	0.015	450	0.12	85.1	0.535	66.1	2.06	5	0.079			4.000	8.31%	177.1
A19	Jane Street	SA33	SA32	0.47	14.52		3	3	9.0	331	0.05	0.16	7.28	0.015	450	0.12	85.1	0.535	99.1	3.09	)	0.119			4.000	8.55%	179.0
		CN1400	CN404	0.40	0.40						0.00		0.07	0.015	200	1 0 00	150	0.404	40.0	0.05		0.055			4 000	0.450/	
A124	Finney Street	SN132	ISN131			**	3	10	3.0	33	10.02	0.05	10.07	0.015	200	0.29	10.2	0.484	51.6			0.000			4,000	3.84%	<u>20.4</u> 58 g
	Finney Street	SN130	ISN129	1.00	1.16		3	10	1 00.0	33	0.10	1 0.07	0.74	0.015	200	0.35	16.7	0.532	10.0	0.31	/	0.035			4.000	4.45%	62.2
A117	Finney Street	SN129	SN128	0.21	1.37		3	1	3.0	36	0.02	0.05	0.82	0.015	200	0.5	20.0	0.636	61.8	1.62	2	0.309			4.000	4.09%	60.3
			011400	0 70						4 -	0.07		0.54					0.400	1051	0.50		0.045			1 000	0.170/	
<u>A118</u>	Gilbert Street	<u>SN135</u>	<u>ISN128</u>	2.73	2.73	·	3	5	15.0	15	0.27	0.26	0.54	0.015	200	0.30	15.5	0.492	105.1	3.56	, 	0.315			4.000	3.47%	56.7
A119	Gilbert Street	SN134	SN128	1.18	1,18		3	8	27.0	27	0.12	0.48	0.59	0.015	200	0.30	15.5	0.492	96.0	3.25	5	0.288			4.000	3.83%	58.9
A120	Finney Street	SN128	SN127	0.43	5.71		3	2	6.0	84	0.04	0.11	2.10	0.015	200	0.30	15.5	0.492	102.1	3.46	5	0.306			4.000	13.55%	94.5
			ON KOT	4 00			<u> </u>					0.50	0.04		000			0.400	00.0			0.000			4 000		
A121	Finne Street	ISN133	15N127	1.09	1.09	1	<u>  3</u>	$\frac{10}{2}$		30	10.11		0.64		200	0.30	15.5	0.492	96.0	3.25		0.288			4.000	4.12%	106.5
			10m124	0.41	1.21		<u>+                                    </u>	<u> </u>	+ 0.0	120	1 0.04		2.00	10.013	200	0.30	10.0	0.492		<u> </u>	<u>'</u>	0.310			4.000	10.0170	100.0
A20	Hughes Street	SA125	SA124	1.07	1.07	·	3	11	33.0	33	0.11	0.58	0.69	0.015	200	0.35	16.7	0.532	127.1	<u>3.9</u> 8	3	0.445			4.000	4.11%	60.4
			0.1/01								0.00				000	0.50	00.0	0.000	00.1	4.00		0.404			1 000		
A21	Hughes Street	<u> SA123</u>	<u>15A124</u>	10.23		5 	<u>  3</u>	2	<u> 6.0</u>		10.02	10,11	10.13		200	0.50	+20.0	0.636		1.00	<u>/ </u>	0.191			4.000	1202%	30.1
<u></u>		<u> 0A124</u>	ISASZ	0.50	9.01				9.0	109	0.05	0.10	3.90	0.015	200	1 0.30	+ 20.1	10.071	00.9	2.03	<u>'</u>	0.201			4.000	13.92.70	118.5
A123	Jane Street	SA126	SA32	0.07	0.07	′ *	3		19.0	19	0.01	0.33	0.34	0.015	250	0.40	32.4	0.660	56.6	1.43	3	0.226			4.000	1.05%	45.3
	Easement	SA32	SA31		23.60		3			519	1		11.52	0.015	450	0.12	85.1	0.535	115.2	3.59	)	0.138			3.966	13.54%	212.6
<b></b>							ļ				<b></b>															<u> </u>	
L					1		1	1			1	_I	L			1	J	1	I	l	_L	L	1		<u> </u>	<u> </u>	

## 2022-03-18 10:37 AM

129

## 1 of 5

# FIGURE 2

ESIGNED	BY:	CSL,JA	
HECKED	BY:	CSL	
JOB	No. ;	221081	

	SANITARY	SEWER	DESIGN	SHEET	- FUTURE	PROJ	ECT NA	ME: \	Nest Lo	orne Sa	anitary So	ervicin	g														
														550			DATE:	March 18, 202	22								
	Industrial I Ir	op. Density =	= 60 = 8640	) people/ha ) litre/ha/dav		SINGLE FAM	ILY		3 8 to 10												CHEC	GNED BY: CKED BY:	CSL,JA CSL				
		Sewage Flow =	22500	litre/ha/day		MULTI FAMIL	Y BA	CHELOR:	1.5	5 PEOPLE											01120	JOB No. :	221081				
						1-	· [	BEDROOM:	2.5	5 PEOPLE		RCIAL / INST		300	litres/pers	on/day											
						2-	. 5	SEDROOM:	3	PEOPLE	REGIDEI			380	nues/pers	on/day											
	LOCATION			ARE	A (A)		F	Populatio	n		S	ewage F	low					SEWE	R DES	SIGN				PRO	FILE		
AREA		FROM	TO	AREA	TOTAL	per	per	No. of	delta	Total	Infilt.	Sewage	Total		SIZE	SLOPE	CAP.	VEL.	LEN.	TIME	DROP	FALL IN	INVERT	ELEV.	PEAKING	%	CALC.
No.	STREET	M.H.	M.H.	hectares	hectares	hectares	Iot	Lots	pop	Popula	. I/s	l/s	l/s	n	mm	%	l/sec.	m/s	meters	min.	IN M.H	SEWER	U.S.	D.S.	FACTOR	CAP.	PIPE
											, .		., •				.,						0.01	2.0.		•••	
A23	Easement	end	SA85	0.17	0.17		3	3	9.0	e e	0.02	0.16	0.18	0.015	200	0.50	20.0	0.636	21.2	0.56	j	0.11			4.000	0.88%	33.9
A24	Easement	SA85	SA86	0.16	0.33		3	3	9.0	18	3 0.02	0.16	0.35	0.015	200	0.50	20.0	0.636	58.5	1.53	5	0.29			4.000	1.75%	43.9
A25	Munroe Street	SA86	SA31	0.47	0.80		3	4	12.0	30	0.05	0.21	0.61	0.015	200	0.47	19.4	0.616	109.1	2.95	)	0.51			4.000	3.14%	54.6
A26	Munroe Street	SA87	SA31	0.49	0.49		3	Δ	12.0	12	2 0.05	0.21	0.26	0.015	200	0.53	20.6	0.655	97.2	2 4 7		0.52			4 000	1 26%	38.8
A27	Ridge Street	SA31	SA30	0.49	25.38		3	4	12.0	573	3 0.05	0.21	12.64	0.015	450	0.12	85.1	0.535	105.5	3.29		0.13			3.943	14.87%	220.2
A28	Main Street	SA71	SA30	0.61	0.61		3	6	18.0	18	3 0.06	0.32	0.38	0.015	200	0.40	17.9	0.569	99.7	2.92	2	0.40			4.000	2.11%	47.1
A 20	Main Street	SV60	\$470	0.25	0.25		3	2	6.0	6	0.03	0.11	0.13	0.015	200	0.40	17.0	0 560	13.6	1 28		0.17			4 000	0 73%	31.6
A29 A30	Main Street	SA70	SA30	0.23	0.23		3	5	15.0	21	1 0.05	0.11	0.15	0.015	200	0.40	17.9	0.569	87.0	2.55		0.17			4.000	2 54%	50.5
A31	Ridge Street	SA30	SA29	0.56	27.40		3	5	15.0	627	7 0.06	0.26	13.79	0.015	450	0.12	85.1	0.535	95.4	2.97	·	0.11			3.922	16.21%	227.5
A32	Easement	<u>SA84</u>	SA83	0.24	0.24	*	3	5	21.0	21	1 0.02	0.37	0.39	0.015	200	0.43	18.5	0.590	45.7	1.29	)	0.20			4.000	2.12%	47.2
<b>V33</b>	Easement Maple Street	SA83	SA82	1.20	0.24		3	10	20.0	2	10.00	0.00	0.39	0.015	200	1.06	29.1	0.926	49.4	0.89	1	0.52			4.000	1.35%	<u>39.8</u>
A33		SAUZ	SAZS	1.20	1.44		5	10	30.0	5	0.12	0.55	1.04	0.015	200	0.40	17.9	0.509	110.0	5.24		0.44			4.000	5.0570	00.9
A34	Maple Street	SA80	SA81	1.05	1.05		3	7	21.0	21	1 0.11	0.37	0.47	0.015	200	0.40	17.9	0.569	96.6	2.83	5	0.39			4.000	2.66%	51.3
A35	Maple Street	SA81	SA29	0.81	1.86		3	6	18.0	_39	0.08	0.32	0.87	0.015	200	0.40	17.9	0.569	99.4	2.91		0.40			4.000	4.88%	64.5
A36	Ridge Street	SA29	SA28	0.36	31.06		3	3	9.0	726	<u> </u>	0.15	15.89	0.015	450	0.12	85.1	0.535	106.1	3.31		0.13			3.885	18.69%	239.9
Δ37	Chestnut Street	SA100	SA101	0.61	0.61		3	6	18.0	12	3 0.06	0.32	0.38	0.015	200	0.35	16.7	0 532	58.8	1.8/		0.21			1 000	2.26%	18.3
A38	Chestnut Street	SA100	SA102	0.73	1.34		3	7	21.0	39	0.00	0.32	0.82	0.015	200	0.35	16.7	0.532	81.8	2.56	;	0.21			4.000	4.91%	64.6
			<b>e</b> / <b>y</b> _	••			, , , , , , , , , , , , , , , , , , ,		•			•.•.	0.0-	0.0.0		0.00		0.001	00								••
FUT C	TOWN HOMES	STUB	SA102	0.69	0.69		3	22	66.0	66	0.07	1.16	1.23	0.013	200	0.40	20.6	0.656	90.0	2.29	)	0.36			4.000	5.97%	69.5
A39	Ridge Street	SA102	SA28	0.33	2.36		3	2	6.0	111	1 0.03	0.11	2.19	0.015	200	0.35	16.7	0.532	99.1	3.11		0.35			4.000	13.10%	93.3
																						ł					
																						I					
																					$\downarrow$						
																						l					
																						I					
											<u> </u>						ļ				$\downarrow$ $\downarrow$						
																+	<b> </b>				┥	<b></b> ا					
											+										+	ļ					
			1		1			1		1						1	1								1	1	1

DESIGNED	BY:	CSL,JA
CHECKED	BY:	CSL
JOB	No. :	221081

#### SANITARY SEWER DESIGN SHEET - FUTURE CONDITIONS 2021

Industrial Pop. Density = Infiltration Rate= Sewage Flow = 2

= 60 people/ha = 8640 litre/ha/day = 22500 litre/ha/day

eople/ha re/ha/day re/ha/day LOT BASIS SINGLE FAMILY COMMERCIAL / INSTUTIONAL: MULTI FAMILY 1-BEDROOM: 2-BEDROOM:

3 PEOPLE 8 to 10 PEOPLE 1.5 PEOPLE

2.5 PEOPLECOMMERCIAL / INSTUTIONAL:300 li3 PEOPLERESIDENTIAL SEWAGE FLOW:380 li

300 litres/person/day 380 litres/person/day

	LOCATION AREA (A)						Population Sewage Flow											SEWE	R DES	SIGN	PROFILE							
AREA		FROM	TO	AREA	TOTAL	per	per	No. of	delta	Total	Infilt.	Sewage	Total		SIZE	SLOPE	CAP.	VEL.	LEN.	TIME	DROP FALL IN	INVERT	ELEV.	PEAKING	%	CALC.		
No.	STREET	M.H.	M.H.	hectares	hectares	hectares	lot	Lots	рор	Popula.	l/s	l/s	l/s	n	mm	%	l/sec.	m/s	meters	min.	IN M.H. SEWER	U.S.	D.S.	FACTOR	CAP.	PIPE		
A40	Wood Street	SV66	SA65	1.63	1.63	*	3	3	13.0	12	0.16	0.23	0.30	0.015	200	0.50	20.0	0.636	60.8	1 9 2	0.35			4 000	1.06%	15 78		
A40		3A00	3A05	1.05	1.05		3	3	13.0	13	0.10	0.23	0.39	0.015	200	0.50	20.0	0.030	09.0	1.03	0.55			4.000	1.90%	45.70		
A41	William Street	SA68	SA67	0.55	0.55		3	3	9.0	9	0.06	0.16	0.21	0.015	200	0.55	20.9	0.667	57	1.42	0.31			4.000	1.02%	35.81		
A42	William Street	SA67	SA65	0.32	0.87		3	2	6.0	15	0.03	0.11	0.35	0.015	200	0.55	20.9	0.667	83.2	2.08	0.46			4.000	1.68%	43.16		
A43	William Street	SN139	SN138	0.95	0.95		3	9	27.0	27	0.10	0.48	0.57	0.015	200	0.35	16.7	0.532	91.4	2.86	0.32			4.000	3.41%	56.35		
A44	William Street	SN138	SA65	0.09	1.04		3	0	0.0	27	0.01	0.00	0.58	0.015	200	0.35	16.7	0.532	47.2	1.48	0.17			4.000	3.46%	56.68		
A45	Wood Street	SA65	SA62	0.44	3.98		3	3	9.0	64	0.04	0.16	1.52	0.015	200	0.50	20.0	0.636	109.1	2.86	0.55			4.000	7.63%	76.20		
A46	Main Street	SA64	SA63	0.92	0.92		3	9	27.0	27	0.09	0.48	0.57	0.015	200	0.35	16.7	0.532	91.4	2.86	0.32			4.000	3.39%	56.23		
A47	Main Street	SA63	SA62	0.53	1.45		3	5	15.0	42	0.05	0.26	0.88	0.015	200	0.35	16.7	0.532	67.1	2.10	0.23			4.000	5.29%	66.42		
<u>A48</u>	Main Street	SA62	SA61	1.00	6.43	4	3	9	27.0	133	0.10	0.48	2.98	0.015	300	0.20	37.2	0.527	91.4	2.89	0.18			4.000	8.01%	116.40		
<u>A49</u> 450	Main Street	SA61 SA60	SA60	0.66	7.09	*	3	2	<u> </u>	149	0.07	0.28	3.33	0.015	300	0.20	37.2	0.527	<u>79.4</u> 01.4	2.51	0.16			4.000	<u>8.94%</u>	121.31		
A51	Main Street	SA59	SA58	0.50	9.41	*	3	3	12.0	190	0.05	0.21	4.28	0.015	300	0.20	37.2	0.527	91.4	2.03	0.18			4.000	11.50%	133.32		
								_																				
<u>A52</u>	Munroe Street	<u>SN137</u>	<u>SN136</u>	0.62	0.62	*	3	0	7.0	7	0.06	0.12	0.19	0.015	200	0.44	18.7	0.596	83	2.32	0.37			4.000	0.99%	35.41		
<u>A116</u>	Easement	SN136	SA56	0.04	0.66	*	3	0	19.0	<u>(</u>	0.00	0.00	0.19	0.015	200	0.44	18.7	0.596	1/	0.48	0.07			4.000	1.01%	35.69		
<u>Α33</u> Δ54	Easement	SA564	SA56R	0.31	0.97		2	5	10.0	20	0.03	0.32	0.54	0.015	200	0.40	17.9	0.569	40.7	0.42	0.10			4.000	3.00%	53.73		
A55	Fasement	SA56B	SA57	0.02	1 12		3	4	12.0	37	0.00	0.00	0.04	0.015	200	0.40	17.9	0.569	32.9	0.96	0.00			4 000	4 27%	61.30		
A56	Main Street	SA57	SA58	0.70	1.82	*	3	3	19.0	56	0.07	0.33	1.17	0.015	200	0.40	17.9	0.569	78.9	2.31	0.32			4.000	6.53%	71.90		
A57	Argyle Street	SA58	SA92	0.51	11.74		3	4	12.0	258	0.05	0.21	5.71	0.015	300	0.20	37.2	0.527	101.5	3.21	0.20			4.000	15.34%	148.52		
<u>Λ58</u>	Manla Street	SA01	5402	0.26	0.26		3	2	6.0	6	0.03	0.11	0 13	0.015	200	0.60	21.0	0.606	68.3	1.63	0.41			1 000	0.60%	20.30		
A59	Aravle Street	SA92	SA93	0.88	12.88		3	7	21.0	285	0.03	0.11	6.30	0.015	300	0.00	37.2	0.527	103	3.26	0.41			4.000	16.92%	154.09		
<u>A60</u>	Elm Street	<u>SA94</u>	SA93	0.25	0.25	*	3	2	21.0	21	0.03	0.37	0.39	0.015	200	0.83	25.7	0.819	69	1.40	0.57			4.000	1.53%	41.74		
A01	Elm Street	5A93	SA30	0.30	13.49		3	3	9.0	315	0.04	0.16	0.89	0.015	300	0.57	62.9	0.889	98.5	1.85	0.56			4.000	10.96%	130.93		
A62	Graham Road	SA55	SA54	0.72	0.72	*	3	4	20.0	20	0.07	0.35	0.42	0.015	200	0.35	16.7	0.532	80.5	2.52	0.28			4.000	2.54%	50.42		
A63	Graham Road	SA54	SA36	0.69	1.41		3	5	15.0	35	0.07	0.26	0.76	0.015	200	0.35	16.7	0.532	97.5	3.05	0.34			4.000	4.53%	62.66		
464	Crohom Bood	SA42	SA/1	2.01	2.01		2	0	27.0	27	0.20	0.49	0.69	0.015	200	0.25	16.7	0 522	00 0	2 10	0.25			4 000	1 05%	60.07		
A65	Graham Road	ISA42	ISA40	1.12	3.13	*	3	4	16.0	43	0.20	0.40	1.07	0.015	200	0.35	16.7	0.532	88.4	2.77	0.31			4.000	6.40%	71.34		
					••		, ,				••••	0.20		0.0.0				0.002							••••			
<u>A66</u>	Merhing Avenue	SA105	SA40	0.62	0.62	*	3	4	12.0	12	0.06	0.21	0.27	0.015	200	0.35	16.7	0.532	91.1	2.85	0.32			4.000	1.63%	42.76		
<u>A67</u>	Graham Road	SA40 SA30	SA39 SA38	0.86	4.61	^	3	<u>2</u>	21.0	/ 0	0.09	0.37	1.80	0.015	200	0.35	16.7	0.532	<u>66.4</u> 71	2.08	0.23			4.000	12/0%	86.69 01.67		
700	Granani Koau	0733	3430	0.70	5.55		5		12.0	00	0.00	0.21	2.09	0.013	200	0.55	10.7	0.332		2.22	0.25			4.000	12.4370	31.07		
A69	Jessie Street	SA104	SA103	0.44	0.44		3	3	9.0	9	0.04	0.16	0.20	0.015	200	0.35	16.7	0.532	69.5	2.18	0.24			4.000	1.21%	38.21		
<u>A70</u>	Jessie Street	SA103	SA38	0.36	0.80		3	3	9.0	18	0.04	0.16	0.40	0.015	200	0.35	16.7	0.532	91.6	2.87	0.32			4.000	2.37%	49.18		
A/1	Granam Road	SA38	SA37	0.99	7.18		3	5	15.0	121	0.10	0.26	2.85	0.015	250	0.25	25.6	0.522	93.6	2.99	0.23			4.000	11.12%	109.69		
A72	Chestnut Street	SA97	SA98	0.81	0.81	*	3	5	19.0	19	0.08	0.33	0.42	0.015	200	0.40	17.9	0.569	89.5	2.62	0.36			4.000	2.32%	48.80		
A73	Chestnut Street	SA98	SA99	0.76	1.57		3	8	24.0	43	0.08	0.42	0.91	0.015	200	0.40	17.9	0.569	92.2	2.70	0.37			4.000	5.11%	65.58		
A74	Chestnut Street	SA99	SA37	0.14	1.71		3	1	3.0	46	0.01	0.05	0.98	0.015	200	0.40	17.9	0.569	41.1	1.20	0.16			4.000	5.49%	67.34		
A/5	Granam Road	SA37	SA36	0.57	9.46	*	3	3	19.0	186	0.06	0.33	4.22	0.015	250	0.25	25.6	0.522	97.8	3.12	0.24			4.000	16.47%	127.12		
A76	Elm Street	SA36	SA35	0.57	24.93		3	5	15.0	551	0.06	0.26	12.18	0.015	450	0.12	85.1	0.535	88.4	2.75	0.11			3.952	14.32%	217.14		
A77	Elm Street	SA35	SA28	0.76	25.69		3	8	24.0	575	0.08	0.42	12.68	0.015	450	0.12	85.1	0.535	89.6	2.79	0.11			3.942	14.90%	220.39		
				l																								

## PROJECT NAME: West Lorne Sanitary Servicing

DESIGNED BY: CSL,JA CHECKED BY: CSL JOB No. : 221081

## SANITARY SEWER DESIGN SHEET - FUTURE CONDITIONS 2021

60 people/ha 8640 litre/ha/day

22500 litre/ha/day

Industrial Pop. Density = Infiltration Rate=

Sewage Flow =

#### PROJECT NAME: West Lorne Sanitary Servicing

LOT BASIS SINGLE FAMILY COMMERCIAL / INSTUTIONAL: MULTI FAMILY BACHELOR: 1- BEDROOM: 2- BEDROOM:

3 PEOPLE 8 to 10 PEOPLE 1.5 PEOPLE

COMMERCIAL / INSTUTIONAL: 2.5 PEOPLE 3 PEOPLE RESIDENTIAL SEWAGE FLOW:

300 litres/person/day 380 litres/person/day

	LOCATION	AREA (A) Population								Sewage Flow							SEWE	R DES	SIGN							
AREA		FROM	TO	AREA	TOTAL	per	per	No. of	delta	Total	Infilt.	Sewage	Total		SIZE	SLOPE	CAP.	VEL.	LEN.	TIME	DROP FALL IN	INVERT	ELEV.	PEAKING	%	CALC.
No	STREET	мн	мн	hectares	hectares	, hectares	lot	Lots	non	Popula	l/s	l/s	l/s	n	mm	%	l/sec	m/s	meters	min	IN M H SEWER	US	DS	FACTOR	CAP	PIPE
110.	OTTLET			nootaroo	nootaroo	nootaroo	101	2010	pop	r opula.	1/0	1/0	1,0			,0	1/000.	111/0	motoro			0.0.	D.0.	17101011	0/ 11 .	
Δ78	Elm Street	SA28	SA27	0.93	60.04		3	8	24.0	1436	0.09	0.39	31 24	0.015	450	0.12	85.1	0.535	103.9	3 24	0.12			3 693	36 73%	309 10
Δ79	Elm Street	SA27	SA26	0.88	60.92		3	- Ŭ	21.0	1457	0.00	0.34	31.67	0.015	450	0.12	85.1	0.535	97.5	3.04	0.12			3 689	37 23%	310.68
A80	Elm Street	SA26	SA25	0.85	61 77		3	6	18.0	1475	0.00	0.29	32.05	0.015	450	0.12	85.1	0.535	100.6	3 14	0.12			3 685	37 68%	312.06
7.00		0/ (20	0/ (20	0.00	01.77		Ŭ	Ŭ	10.0	1170	0.00	0.20	02.00	0.010	100	0.12	00.1	0.000	100.0	0.11	0.12			0.000	01.0070	012.00
A81	Munroe Street	SA87	SA88	0.34	0.34		3	2	6.0	6	0.03	0.11	0.14	0.015	200	0.35	16.7	0.532	96	3.01	0.34			4.000	0.84%	33.24
A82	Munroe Street	SA88	SA89	0.57	0.91		3	5	15.0	21	0.06	0.26	0.46	0.015	200	0.35	16.7	0.532	105.8	3.32	0.37			4.000	2.76%	52.01
A83	Munroe Street	SA90	SA89	0.40	0.40		3	5	15.0	15	0.04	0.26	0.30	0.015	200	0.35	16.7	0.532	69.5	2.18	0.24			4.000	1.82%	44.51
A84	Wellington Street	SA89	SA73	0.43	1.74		3	2	6.0	42	0.04	0.11	0.91	0.015	300	0.20	37.2	0.527	107.6	3.40	0.22			4.000	2.45%	74.67
A85	Main Street	SA71	SA72	1.08	1.08	*	3	6	31.0	31	0.11	0.55	0.65	0.015	200	0.40	17.9	0.569	101.8	2.98	0.41			4.000	3.66%	57.84
A86	Main Street	SA72	SA73	0.99	2.07		3	9	27.0	58	0.10	0.48	1.23	0.015	200	0.40	17.9	0.569	99.4	2.91	0.40			4.000	6.87%	73.27
107	M : 0( (	0.4.70	0.475	0.50	0.50			_	04.0	0.4	0.00	0.40	0.00	0.045	000	0.40	47.0	0.500	04.4	0.40	0.04			4 000	0.000/	50.05
<u>A87</u>	Main Street	SA76	SA75	2.56	2.56		3	8	24.0	24	0.26	0.42	0.68	0.015	200	0.40	17.9	0.569	84.1	2.46	0.34			4.000	3.80%	58.65
<u> </u>	Main Street	SA/5	SA/4	1.22	3.78		3	10	30.0	54	0.12	0.53	1.33	0.015	200	0.40	17.9	0.569	118.6	3.48	0.47			4.000	7.43%	/5.46
<u>A89</u>	Mallington Street	SA/4	SA/3	0.73	4.51		3	0	18.0	101	0.07	0.32	1.72	0.015	200	0.40	17.9	0.509	108.8	3.19	0.44			4.000	9.01%	83.11
A90	weilington Street	SAIS	SATS	0.51	0.03		3	3	9.0	101	0.05	0.10	4.07	0.015	300	0.20	31.Z	0.527	09.9	2.04	0.10			4.000	10.92%	130.70
Δ01	Manle Street	SA80	SA70	0.85	0.85		3	8	24.0	2/	0 00	0.42	0.51	0.015	200	1 16	30.4	0.068	103.3	1 78	1 20			1 000	1 67%	13.08
A31		0700		0.00	0.00			0	27.0		0.03	0.72	0.01	0.013	200	1.10	50.4	0.300	100.0	1.70	1.20			4.000	1.07 /0	43.00
A92	Maple Street	SA77	SA78	0.70	0.70		3	7	21.0	21	0.07	0.37	0.44	0.015	200	0.40	17.9	0.569	58.8	1.72	0.24			4.000	2.46%	49.84
A93	Maple Street	SA78	SA79	0.57	1.27		3	5	15.0	36	0.06	0.26	0.76	0.015	200	0.40	17.9	0.569	74.7	2.19	0.30			4.000	4.26%	61.22
A94	Wellington Street	SA79	SA25	0.52	11.47		3	3	9.0	250	0.05	0.16	5.55	0.015	300	0.20	37.2	0.527	110	3.48	0.22			4.000	14.89%	146.87
A95	Elm Street	SA96	SA95	0.40	0.40		3	2	6.0	6	0.04	0.11	0.15	0.015	200	1.00	28.2	0.899	68	1.26	0.68			4.000	0.52%	27.74
A96	Elm Street	SA95	SA25	0.35	0.75		3	2	6.0	12	0.04	0.11	0.29	0.015	200	0.40	17.9	0.569	63.1	1.85	0.25			4.000	1.60%	42.44
	Easement	SA25	SA24		73.99		3		0.0	1737	0.00	0.00	37.88	0.015	450	0.12	85.1	0.535	67.5	2.10	0.08			3.633	44.53%	332.25
	Easement	SA24	SA23		73.99		3		0.0	1/3/	0.00	0.00	37.88	0.015	450	0.12	85.1	0.535	62.8	1.96	0.08			3.633	44.53%	332.25
		SA23	SA22		73.99		3		0.0	1/3/	0.00	0.00	37.88	0.015	450	0.12	85.1	0.535	80.6	2.51	0.10			3.633	44.53%	332.25
	Easement	SAZZ	SAZI		73.99		3		0.0	1/3/	0.00	0.00	37.88	0.015	450	0.12	85.1	0.535	59	1.84	0.07			3.633	44.53%	332.25
	בו ודו וסב פו ופיח	QTI IB	SA21	17.90	17.80		3	117	351.0	351	1 70	6 1 8	7.06	0.013	200	0.40	20.6	0.656	00	2.20	0.36			4 000	38 50%	120.05
1010	TUTURE SUBD.	3100	JAZ I	17.00	17.00		5		551.0	551	1.70	0.10	7.90	0.013	200	0.40	20.0	0.000	90	2.29	0.30			4.000	30.3970	139.93
	Fasement	SA21	SA20		91 79		3		0.0	2088	0.00	0.00	45.83	0.015	450	0.12	85.1	0.535	72.8	2 27	0.09			3 571	53 89%	356.87
	Fasement	SA20	SA19		91 79		3		0.0	2088	0.00	0.00	45.83	0.015	450	0.12	85.1	0.535	98.5	3.07	0.00			3 571	53 89%	356.87
	Fasement	SA19	SA18		91 79		3		0.0	2088	0.00	0.00	45.83	0.015	450	0.12	85.1	0.535	66.4	2 07	0.08			3 571	53 89%	356.87
	Easement	SA18	ISA17		91.79		3		0.0	2088	0.00	0.00	45.83	0.015	450	0.12	85.1	0.535	71	2.21	0.09			3.571	53.89%	356.87
	Easement	SA17	SA16		91.79		3		0.0	2088	0.00	0.00	45.83	0.015	450	0.12	85.1	0.535	76.5	2.38	0.09			3.571	53.89%	356.87
	Easement	SA16	SA15		91.79		3		0.0	2088	0.00	0.00	45.83	0.015	450	0.12	85.1	0.535	72.5	2.26	0.09			3.571	53.89%	356.87
	Easement	SA15	SA14		91.79		3		0.0	2088	0.00	0.00	45.83	0.015	450	0.12	85.1	0.535	64.6	2.01	0.08			3.571	53.89%	356.87
	Easement	SA14	SA13		91.79		3		0.0	2088	0.00	0.00	45.83	0.015	450	0.12	85.1	0.535	66.1	2.06	0.08			3.571	53.89%	356.87
	Easement	SA13	SA12		91.79		3		0.0	2088	0.00	0.00	45.83	0.015	450	0.12	85.1	0.535	90.2	2.81	0.11			3.571	53.89%	356.87
	Easement	SA12	SA11		91.79		3		0.0	2088	0.00	0.00	45.83	0.015	450	0.12	85.1	0.535	91.7	2.86	0.11			3.571	53.89%	356.87
	Easement	SA11	SA10		91.79		3		0.0	2088	0.00	0.00	45.83	0.015	450	0.12	85.1	0.535	48.2	1.50	0.06			3.571	53.89%	356.87
		1	1	1				1			1	1		1 1		1	1	1		1	1 1					

DESIGNED	BY:	CSL,JA
CHECKED	BY:	CSL
JOB	No. :	221081

DATE: March 18, 2022

SANITARY SEWER DESIGN SHEET - FUTURE CONDITIONS 2021 P													ME:	: West Lorne Sanitary Servicing													
	LOT BASIS																	0						DATE:	March 18, 202	22	
	Industrial P	op. Density =	6	0 people/ha		SINGLE FAM	ILY		3	PEOPLE											DESI	GNED BY:	CSL,JA				
	S	Sewage Flow =	2250	0 litre/ha/day			Y BAC	TIONAL: CHELOR	8 to 10	PEOPLE PEOPLE											OHLC	JOB No. :	221081				
		0		,		1-	- B	EDROOM:	2.5	PEOPLE	COMMER	CIAL / INSTU	JTIONAL:	300	litres/perso	n/day											
						2-	- BI	EDROOM:	3	PEOPLE	RESIDEN	TIAL SEWAG	GE FLOW:	380	litres/perso	n/day											
	LOCATION	A (A)		F	Populatio	n	Sewage Flow								SEWER DESIGN						PROFILE						
AREA		FROM	ТО	AREA	TOTAL	per	per	No. of	delta	Total	Infilt.	Sewage	Total		SIZE	SLOPE	CAP	VEL.	LEN.	TIME	DROP	FALL IN	INVERT	ELEV.	PEAKING	%	CALC.
No	STREET	мн	МН	hectares	hectares	hectares	lot	Lots	non	Popula	l/s	l/s	l/s	n	mm	%	l/sec	m/s	meters	min	IN M H	SEWER	US	DS	FACTOR	CAP	PIPE
110.	OTTLET	101.11.	101.111.	neotares	neotares	neotares	101	LOID	pop	r opulu.	1/3	1/5	1/0			70	1/000		metero			OLWEIN	0.0.	D.0.	17.0101	0/11.	
A97	Graham Road	SA42	SA43	1.28	1.28		3	7	21.0	21	0.13	0.37	0.50	0.015	200	0.35	16.7	0.532	89.30	2.80		0.31			4.000	2.98%	53.5
A98	Graham Road	SA43	SA44	1.01	2.29	*	3	3	58.0	79	0.10	1.02	1.62	0.015	200	0.35	16.7	0.532	89.90	2.82		0.31			4.000	9.69%	83.3
A99	Graham Road	SA44	SA45	0.97	3.26		3	4	12.0	91	0.10	0.21	1.93	0.015	200	0.35	16.7	0.532	91.10	2.85		0.32			4.000	11.53%	89.0
A100	Graham Road	SA45	SA47	0.97	4.23	4	3	4	12.0	103	0.10	0.21	2.24	0.015	200	0.35	16.7	0.532	78.00	2.44		0.27			4.000	13.37%	94.1
A101	Graham Road	SA47	SA48	0.73	4.96	*	3	3	20.0	123	0.07	0.35	2.66	0.015	200	0.35	16.7	0.532	69.50	2.18		0.24			4.000	15.92%	100.4
A102	March Lino	SA40	SA49 SA50	1.21	6.17		3	3	19.0	142	0.12	0.33	3.12	0.015	200	0.35	10.7	0.532	105.80	3.32		0.37			4.000	10.04%	100.5
Δ103	Marsh Line	SA49 SA50	SA50 SA51	0.32	6.69		3		0.0	145	0.03	0.05	3.20	0.015	250	0.35	30.3	0.017	90.90	2.02		0.34			4.000	10.50%	107.0
A104	Marsh Line	SA51	SN140	0.20	6.82		3	Ő	0.0	145	0.02	0.00	3.22	0.015	250	0.55	41.9	0.854	66.30	1 29		0.33			4 000	7 71%	95.6
71100		0/101		0.10	0.02		Ŭ	Ť	0.0	110	0.01	0.00	0.20	0.010	200	0.07	11.0	0.001	00.00	1.20		0.11			1.000	1.11/0	00.0
A106	Todd Place	SN144	SN143	0.88	0.88		3	9	27.0	27	0.09	0.48	0.56	0.015	200	0.49	19.8	0.629	76.20	2.02		0.37			4.000	2.85%	52.7
A107	Todd Place	SN143	SN142	0.44	1.32		3	5	15.0	42	0.04	0.26	0.87	0.015	200	1.84	38.3	1.220	70.40	0.96		1.30			4.000	2.27%	48.4
																						0.40			1	0.000/	
A108	Angelo Street	end	<u>SN142</u>	0.28	0.28		3	2	6.0	6	0.03	0.11	0.13	0.015	250	0.48	35.5	0.723	27.60	0.64		0.13			4.000	0.38%	30.8
A109	Angelo Street	SN142	SN141	0.59	0.87		3	4	12.0	18	0.06	0.21	0.40	0.015	250	0.48	35.5	0.723	101.70	2.34		0.49			4.000	1.14%	46.7
Δ110	Todd Place	SN144	SN1/5	0.77	0.77		3	6	18.0	18	0.08	0.32	0.30	0.015	200	0.47	10 /	0.616	102 30	2 77		0.48			4 000	2.03%	16.4
A110 A111	Todd Place	SN145	SN146	1 11	1.88		3	7	21.0	39	0.00	0.32	0.33	0.015	200	0.48	19.9	0.623	72 70	1.95		0.40			4 000	4 47%	62.3
A112	Todd Place	ISN146	SN141	0.64	2.52		3	7	21.0	60	0.06	0.37	1.31	0.015	200	0.36	16.9	0.539	73.80	2.28		0.27			4.000	7.72%	76.5
A113	Angelo Street	SN141	SN140	0.53	3.92		3	4	12.0	90	0.05	0.21	1.98	0.015	250	0.49	35.8	0.730	77.50	1.77		0.38			4.000	5.51%	84.3
A114	Marsh Line	SN140	SA52	0.09	10.83		3	0	0.0	235	0.01	0.00	5.22	0.015	250	0.67	41.9	0.854	30.60	0.60		0.21			4.000	12.45%	114.4
A115	Marsh Line	SA52	SA53	0.19	11.02		3	0	0.0	235	0.02	0.00	5.24	0.015	250	0.68	42.2	0.860	97.20	1.88		0.66			4.000	12.40%	114.3
		OTUD	CAE2	2 10	2 10		2	26	100.0	100	0.22	1.00	0.00	0.012	200	0.40	20.6	0.656	00.00	2.20		0.26			4 000	10 770/	06.7
FULA	CREEKSEDGE	3100	3A33	3.19	3.19		3	30	100.0	100	0.32	1.90	2.22	0.013	200	0.40	20.0	0.050	90.00	2.29		0.30			4.000	10.7770	00.7
A116	Marsh Line	SN53	SA10	0.20	14.41		3	0	0.0	343	0.02	0.00	7.48	0.015	250	0.51	36.6	0.745	97.20	2.17		0.50			4.000	20.44%	137.8
				0.55	0.55			0.1	00.0	00	0.00	1.0.1	1.00	0.040	000	0.40	00.0	0.050	00.00	0.00		0.00			1 0 0 0	0.470/	04 7
FULB	CREEK'S EDGE	SIUB		2.55	2.55		3	31	93.0	93	0.26	1.64	1.89	0.013	200	0.40	20.6	0.656	90.00	2.29		0.36			4.000	9.17%	81.7
A110A			SAIU	0.19	2.74		3	U	0.0	93	0.02	0.00	1.91	0.013	200	0.40	20.6	0.000	ō2.50	2.10	╞───┤	0.33			4.000	9.21%	ō2.U
	Fasement	SA10	P STA		108.94		3	0	0.0	2524	0.00	0.00	55 22	0.015	450	0.12	85.1	0.535	9 50	0.30	╞──┤	0.01			3 505	64 92%	382 7
	Easement	P.STA.	ISA9		108.94		- ă	ŏ	0.0	2524	0.00	0.00	55.22	0.015	450	0.12	85.1	0.535	3.00	0.09		0.00			3.505	64.92%	382.7
	Easement	SA9	SA8		108.94		3	Ŏ	0.0	2524	0.00	0.00	55.22	0.015	450	0.12	85.1	0.535	11.00	0.34		0.01			3.505	64.92%	382.7
	Easement	SA8	SA7		108.94		3	0	0.0	2524	0.00	0.00	55.22	0.015	450	0.12	85.1	0.535	63.40	1.98		0.08			3.505	64.92%	382.7
	Easement	SA7	SA6		108.94		3	0	0.0	2524	0.00	0.00	55.22	0.015	450	0.12	85.1	0.535	70.10	2.18		0.08			3.505	<u>64.92%</u>	382.7
	Lasement	ISA6	ISA5		108.94		3	0	0.0	2524	0.00	0.00	55.22	0.015	450	0.12	85.1	0.535	104.90	3.27		0.13			3.505	64.92%	382.7
	Lasement	SA5	ISA4		108.94		3		0.0	2524	0.00	0.00	55.22	0.015	450	0.12	85.1	0.535		3.33	╞───┤	0.13			3.505	60.40%	382.1
		SA4 SA3	ISAJ	+	108.94		3		0.0	2524	0.00	0.00	<u>55.22</u>	0.015	450	0.14	81.9	0.578	93.00	2.70	╞───┤	0.13			3.505	62 37%	3770
	Fasement	ISA2	ISA1		108.94		3	0	0.0	2524	0.00	0.00	55 22	0.015	450	0.13	107 0	0.007	75.60	1.87	╞──┤	0.12			3 505	51 59%	351.0
		5, 2			100.04				0.0	2024	0.00	0.00	00.22	0.010		0.10			10.00	1.07		V. 17			0.000	51.0070	001.1
		DEVICE																									
	*		<u>S POPU</u>			LED BASE	<u>-D ON</u>	MEASUF	KED WA	IER ME	<u>IER RI</u>	<u>-CORDS</u>	5	<u> </u>	<u> </u>				<u> </u>								
		HO SUPP	- <u>רודה R</u>			Y 															├───						
		1	I		I	I	I	1			1			1	1	L	1	_1	1	I					1	l	

# APPENDIX 'C'

# **TYPICAL PHOTOS**



WEST LORNE SANITARY SEWER STUDY 2021

Municipality of West Elgin



Figure 1-Munroe @ Ridge - looking South along Ridge



Figure 2-Munroe @ Ridge - looking North along Ridge Ext.

WEST LORNE SANITARY SEWER STUDY 2021

Municipality of West Elgin



Figure 3-Jane @ Finney - looking South along Finney Ext.



Figure 4-Elm @ Wellington - looking South along Wellington Ext.

WEST LORNE SANITARY SEWER STUDY 2021 Municipality of West Elgin



Figure 5-Elm @ Wellington - looking North along Wellington



Figure 6-Elm @ Wellington - looking East along Elm

# APPENDIX 'D'

## **MISCELLANEOUS FIGURES**

# FIGURE NO. 3

# OFFICIAL PLAN SCHEDULE 'D' LAND USE & TRANSPORTATION PLAN

# FIGURE NO. 4

## ZONING MAP SCHEDULE 'C' WEST LORNE AND AREA (MAPS NO. 1 – 6)



# FIGURE 3

Municipality of WEST ELGIN

Village of WEST LORNE LAND USE & TRANSPORTATION PLAN Schedule 'D'



# **FIGURE 4**

## Municipality of WEST ELGIN: Schedule "C" WEST LORNE and Area













# Municipality of WEST ELGIN: WEST LORNE and AREA SCALE 1:5,000

144

400

cheuule C

Map No. 4


0 50 100 200 300 Municipality of West Elgin Zoning By-Law

145

Metres

400

Map No. 5



Map No. 6



# The Municipality of West Elgin

22413 Hoskins Line, Rodney Ontario NOL 2C0

March 29, 2021

At the Regular Meeting of Council on March 25, 2021 the Council of the Municipality of West Elgin passed the following Resolution:

## Resolution No. 2021- 96 Moved: Councillor Cammaert Seconded: Deputy Mayor Leatham

That West Elgin Council hereby receives the report from Lee Gosnell, Manager of Operations & Community Services; and

That West Elgin Council approve completion of a sanitary capacity study for the town of West Lorne to be completed by Spriet Associates at cost of up to \$22,000 plus applicable taxes.

## Carried

Jana) Ethice

Jana Nethercott Clerk



#### Staff Report

Report To:	Council Meeting	
From:	Lee Gosnell, Manager of Operations & Community Services	
Date:	2022-06-23	
Subject:	Large Item Collection	

#### **Recommendation:**

That West Elgin Council hereby receives the report from Lee Gosnell, Manager of Operations & Community Services; And

That West Elgin Council supports staff's decision to eliminate large item collection beginning in 2023 and replace it with a 'Free' large item week at the municipal landfill.

#### Purpose:

The purpose of this report is to brief West Elgin Council on the 2022 large item collection program and provide an environmentally friendly/cost effective alternative for future years.

#### Background:

The municipality of West Elgin has offered a large item collection day in conjunction with its curbside pickup program in past years. This day was typically set in May and consisted of the municipality's waste contractor(s) collecting 'large items' at the curb. The list of acceptable items was well defined, and consisted of bulky furniture, mattresses, and metal appliances. These would be things that could not be set out on a normal collection day.

Residents of Rodney and West Lorne received this service for many years as part of town collection, and rural areas began receiving the service in 2021 with the move to municipal wide collection. In past years, the waste contractor could complete this program within 1-2 days, utilizing one crew of 3-4 operators.

The 2020 large item collection was anything but normal. With Covid restrictions in place, and residents being stuck at home, many people used the program to purge 'all things waste'. The majority of garbage place curbside did not constitute as large item, with much of it being left loose or piled on top of the items that qualified for pickup. The contractor did remove all items, even though it went against the true intention of the program. Collection times in Rodney and West Lorne double from the previous year.

After the issues faced in 2020, staff worked to educate residents on the large item program, and what types of items were deemed acceptable. Waste Collections had not charged extra for the additional work in 2020, and everyone hoped it would be an anomaly. However, due to the ongoing Covid pandemic, and this being the first year of municipal wide large item pickup, staff planned on utilizing a small crew from public works in the rural area to help assist the waste contractor. It was very evident after the first day that more resources would be needed to deal with the large volume

of material which had again been placed curbside. It required five days of collection (Mon-Fri), two crews from Waste Connections and two crews from public works to eventually collect all the items.

Fast forward to 2022 large item collection. Elimination of Covid restrictions and targeted advertising regarding program details did help reduce the quantity of material slightly, however it still took crews from Waste Connections and West Elgin public works five days to complete the collection. Like the previous two years, much of the garbage placed curbside would not be eligible for collection under the program. Crews collected a wide variety of loose material, including brush/yard waste, metal, tires, and many other things that could easily be recycled.

This leads to the concerns regarding continuation of this program. When these items are piled together and collected curbside, there is no way of sorting them once they reach the landfill. Collection crews must utilize the West Elgin landfill for dumping purposes, therefore large volumes of waste are being needlessly landfilled, and reducing valuable landfill capacity. It is estimated the municipal landfill received 30 - 35 full truckloads of garbage from this year's large item collection. On a volume basis, this equates to one-quarter to one-third of the total yearly household garbage collected in the municipality. In addition, increased labour and equipment costs, coupled with allocation of staff time to collect and manage the incoming trash, have put a strain on operations and budgets.

For these reasons, staff are recommending elimination of the large item collection program in favour of a 'Free' large item week to be held annually at the municipal landfill. During the advertised week (ideally held during the same time in May), residents could dispose of large items at no charge. This change would create two important benefits –

- By requiring items be delivered to the landfill, a detailed sorting/inspection program on site would ensure ALL recyclable material is handled properly and does not end up in the landfill. This option is environmentally friendly, increases landfill life expectancy and provides revenue for the municipality from added material delivered to the processors.
- 2. This program would greatly reduce staff time required for curbside collection, thus reducing waste handling expenses and allowing staff to focus their attention on other springtime operations

## Financial Implications:

Rising fuel costs are putting a strain on many operations, especially areas like waste collection, where trucks are required to move material. While elimination of the program does require residents to deliver material rather than receiving curbside pickup, the benefits of free disposal, proper sorting, extended landfill life, reduced costs and enhanced revenue will benefit all residents of West Elgin in future years.

## **Report Approval Details**

Document Title:	Large Item Collection - 2022-56-Operations Community Services.docx
Attachments:	
Final Approval Date:	Jun 21, 2022

This report and all of its attachments were approved and signed as outlined below:

Jana Nethercott



#### Staff Report

Report To:	Council Meeting
From:	Jana Nethercott, Clerk
Date:	2022-06-23
Subject:	Amendments to the Procedural By-law

#### Recommendation:

That West Elgin Council hereby receives the report from Jana Nethercott re: Amendments to the Procedural By-law; and

That West Elgin Council provide the following feedback on the proposed draft amendments to the Procedural By-law; and

That West Elgin Council direct staff to return with a final version of the amended Procedural By-law at the next Council Meeting.

#### Purpose:

The purpose of this report is to gain Council feedback on proposed amendments to the Procedural By-law.

#### Background:

With changes introduced in the Municipal Elections Act in 2022, the Procedural By-law needed to be updated to allow for the inaugural meeting to take place in November instead of December and so staff took the opportunity to update other parts of the by-law to assist in the flow of the agenda and meetings. Changes to the by-law appear in red in the draft by-law appended to this report.

Section 4.1 - This change reflects the latest update to the Municipal Elections Act (Section 6(1)), which changed the first day of the new term of Council from the First Monday in December to November 15.

"Inaugural Meetings shall be held on the first Thursday of the new term of Council Monday in December following a Regular Municipal Election at 7:00 pm. In case of inclement weather, the Inaugural Meetings shall be held on the first suitable day following, at the same hour, and Notice shall be given on the Municipal website and posted at the Municipal Office."

Section 4.2.1 – This change was necessitated by the renovation of the Municipal Office. Now that Council Chambers will permanently be located at the West Lorne Complex, the by-law needed to be updated. Presently we are operating under a resolution to allow a temporary location. This section has been amended previously to allow for electronic participation.

"Meetings of Council shall be held in the Council Chambers in the Municipal Building in the West Elgin Community Complex located at 22413 Hoskins Line, Rodney 160 Main

Street, West Lorne, unless otherwise decided by Resolution of Council or as provided for in the *Municipal Act, 2001* when Notice is given. Attendance may be by electronic participation. 2021-04"

Section 4.2.4 – There some minor changes to the meeting schedule section. These changes allow for more flexibility in the meeting dates and times and better transparency with a published meeting schedule.

- a) this change allows more freedom in setting the Council dates and is what has been in practice now, in order to ensure that meetings are not missed due to the election and/or statutory holidays.
  - a) "Prior to the 31<sup>st</sup> of December in each year first meeting in each calendar year, the Council shall establish a schedule of all regular Council meeting dates for the calendar year. This Calendar shall be posted on the Municipal Website. Except as otherwise noted on the meeting schedule, meetings shall generally be held on the second and fourth Thursday of the month at 9:30 a.m. except for July, August and December. Council will meet the 3rd Thursday in July, the 2nd Thursday in August and the 3rd Thursday in December. Council may by resolution, alter the date and/or time of a regular meeting when deemed necessary, provided that notice is given pursuant to this by-law. When a meeting is scheduled on a Public Holiday, it shall be held on the next business day at the same hour.
- b) This change allows for a set time for the curfew, instead of length of time in the meeting. This update allows the meeting to proceed
  - b) The meeting curfew shall be 4:00 p.m. on the published day of the meeting three hours from the published start time of the meeting. Council may by resolution, proceed past the curfew for up to one hour, in order to proceed past the one-hour extension the unanimous consent of Members present shall be required

Section 4.2.6 Order of Business – this is the layout of the agenda and this section has some updates that we are already doing (location of Closed Session and Report from Closed) as well as the new addition of a Consent Agenda. The Consent Agenda is used for items that generally require little to no discussion, for things such as monthly reports, correspondence (with no requests) and other general information reports, including awarding of tenders that were previously approved in the budget. This is a way of speeding up the meetings an reducing the number of vote as there will be one resolution to approve the consent agenda. This does not mean that Council can not ask questions, they can ask basic clarification questions or can also request that an item be removed from the consent agenda (this is done during the approval of the agenda) and then it will be placed in the Consideration of Items Requiring Discussion which appears right after the Consent Agenda. This idea of a consent agenda is used effectively in many Council's agendas to move thru routine reports.

4.2.5.1. The Agenda for each Meeting shall be prepared by the CAO/Clerk or designate. The order of the proceedings shall be as follows, or as otherwise determined by the CAO/Clerk or designate:

- 1. Call to Order
- 2. Adoption of Agenda
- 3. Closed Session
- 4. Report from Closed Session
- 5. Disclosure of Pecuniary Interest
- 6. Public Meeting
- 7. Delegations
- 8. Minutes
- 9. Business Arising from Minutes
- 10. Consent Agenda
- 11. Staff Reports
- 12. Committee and Board Reports
- 13. Accounts
- 14. Consideration of Items Requiring Discussion
- 15. Council Inquires/ Announcements
- 16.By-Laws
- 17. Confirming By-Law
- 18. Adjournment
  - 4.2.5.2 The Consent Agenda will include the following items:
    - a) Communications from other Municipalities
    - b) Procurement items that are within the approved budget
    - c) Monthly Staff information reports
    - d) Items as directed by the CAO, Clerk or Mayor
    - i. Questions of clarification may be asked by Members about any consent item during the adoption of the Consent Agenda without requiring a separate vote.
    - ii. Members may request that a matter be removed from the Consent Agenda to be dealt with under Consideration of Items Requiring Discussion (Regular Agenda).
    - iii. In the event that a Member declares pecuniary interest on an item that is included on the Consent Agenda, that item shall be considered under Consideration of Items Requiring Discussion.
    - iv. The Consent Agenda shall be adopted by a single motion.

These updates being proposed are tweaks to the existing by-law to ensure a smooth transition to a new term of Council and staff are looking for feedback from the current Council on these changes prior to bringing a by-law amendment forward.

## Financial Implications:

There are no financial implications

#### Policies/Legislation:

Municipal Act, 2001 requires a procedural by-law.

## MUNICIPALITY OF WEST ELGIN

## BY-LAW NO. 2018-43

## AMEND PROCEDURAL BY-LAW

## AS AMENDED BY:

Date May 23, 2019 March 20, 2020 January 28, 2021

1



The Corporation Of The Municipality Of West Elgin

## By-Law 2018-43

## Being a By-Law to establish rules of procedure for the meetings of Council, Council Committees and Boards of The Corporation of the Municipality of West Elgin

**Whereas** Section 238(2) of the *Municipal Act, 2001, S.O. 2001,* Chapter 25, as amended, provides that every Council shall adopt a Procedural By-Law for governing the calling, place and proceedings of meetings; and

**Whereas** Section 238(2.1) of the *Municipal Act, 2001, S.O. 2001,* Chapter 25 requires that the procedural by-law shall provide for public notice of meetings; and

**Whereas** the Council of the Municipality of West Elgin deems it necessary to enact a procedural by-law to establish rules governing the calling, place, proceedings and giving of public notice of meetings of Council and its Committees;

**Now therefore be it resolved that** The Corporation of the Municipality of West Elgin hereby enacts as follows:

#### INDEX

1.	Short Title		
2.	Definitions		
3.	General Rules4		
4.	Council Meetings4		
4	.1	Inaugural Meeting4	
4	.2.	Regular Meetings4	
4	.3.	Special Meetings6	
4	.4.	Public Statutory Meetings	
4	.5.	Closed Session7	
5.	No	tice of Meetings7	
5	5.1	Notice - Regular Meetings8	
5	5.2.	Notice - Special Meetings8	
5	5.3.	Notice - Emergency Meetings8	
5	5.4.	Notice - Change in Meeting Schedule8	
6.	Со	mmunications, Delegations & Petitions8	
7.	Mir	nutes9	
8.	Со	mmencement Of Meetings9	
9.	Ro	le of the Mayor as Head of Council and Role of Council10	
10.	Ru	les of Conduct10	
11.	Ru	les of Debate11	
12.	Qu	estions of Privilege and Order11	
13.	3. Motions12		
14.	4. Voting Procedures14		
15.	5. Reconsideration14		
16.	<ol> <li>Enactment of By-Laws15</li> </ol>		
18.	3. Disclosures of Pecuniary Interest and General Nature Thereof		
19.	<ol> <li>Mayor and Councillor Comments and Announcements17</li> </ol>		
20.	Co	nfirming By-Law	
		2	

21.	Validity and Severability	17
22.	Accessibility of Documents	17
23.	Enactment	17

## 1. Short Title

This By-Law shall be known as "The Procedural By-Law".

- 2. Definitions
  - 2.1. "CAO" means Chief Administrative Officer, or designate, for the Municipality of West Elgin.
  - 2.2. "Chair" means the person presiding at a meeting whether it be the mayor, a Member of Council or a duly appointed Member of a Committee.
  - 2.3. "Clerk" means the Clerk or designate, for the Municipality of West Elgin.
  - 2.4. "Closed Session" shall mean a meeting or part of a meeting of Council, a Council Committee or a Local Board and its Committees, not open to the public in accordance with the *Municipal Act, 2001, S.O. 2001,* Chapter 25, as amended.
  - 2.5. "Communication Device" shall include cellular phones, tablets, computers or any other technological equipment used for communication.
  - 2.6. "Committee" shall mean a Committee established by Council, the Members of which have been appointed by Council.
  - 2.7. "Committee of the Whole" shall mean a Committee composed of all of the Members of Council.
  - 2.8. "Conflict of Interest" means a pecuniary interest as defined in the *Municipal Conflict* of Interest Act.
  - 2.9. "Delegation" means a person or group of persons who address Council on behalf of an individual or a group for the purpose of making a presentation to Council.
  - 2.10. "Deputy Mayor" means the Member of Council who has been elected as a deputy mayor.
  - 2.11. "Electronic Participation" shall mean through a computer or telephone platform. 2021-04
  - 2.12. "Emergency" means a situation or the threat of an impending situation caused by forces of nature, accidents or an intentional act that constitutes a danger of major proportions to life and property that affects public safety; meaning health, welfare and property as well as the environment and economic health of the municipality, as defined in the municipality's Emergency Response Plan.
  - 2.13. "Head of Council" means the Mayor.
  - 2.14. "Meeting shall mean any regular, special or other meeting of a council, of a local board or of a committee of either of them, where;
    - (a) A quorum of members is present, and
    - (b) members discuss or otherwise deal with any matter in a way that materially advances the business or decision-making of the council, local board or committee.
  - 2.15. "Member" shall mean a Member of West Elgin Council, its Committees or its local boards.
  - 2.16. "Municipal Office" shall mean the offices at 22413 Hoskins Line, Rodney Ontario.
  - 2.17. "Public Meeting" shall mean a public meeting as defined under any Act where Council has a requirement to hold a public meeting.

- 2.18. "Quorum" shall mean a majority of the whole number of Members of Council or a Committee.
- 2.19. "Recorded Vote" shall mean the recording of the name and vote by the Clerk of every Member voting on any matter or question during a Council meeting, in accordance with the Municipal Act, 2001.
- 2.20. "Resolution" means a vote taken on a motion that has been moved and seconded by Members of Council or Members of a Committee.
- 3. General Rules
  - 3.1. Throughout this by-law, the words "he" and "his" shall, where appropriate; be deemed to read "she" and "her".
  - 3.2. The rules and regulation contained in this by-law shall be observed in all proceedings of Council and Council Committees and shall be the rules and regulations for the order and dispatch of business in Council and Council Committees meetings.
  - 3.3. The provisions contained in this by-law shall govern the proceedings of Council and Committees, as appointed by Council from time to time, unless otherwise prescribed.
  - 3.4. Where this by-law is silent on a procedural matter the proceedings shall be regulated in accordance with Robert's Rules of Order, Newly Revised, 11<sup>th</sup> Edition.
  - 3.5. Any part or parts of this by-law may be suspended by a vote with the consent of Council Members present, unless the part(s) is prescribed by statute or law.
  - 3.6. A Member of Council not able to be in attendance or who is going to be late for a meeting shall inform the Clerk in advance of the meeting, when possible.
  - 3.7. No person shall be allowed onto the floor of Council during meetings, except Members, employees and servants of the Corporation, and Delegations.
  - 3.8. Videotaping, video streaming or audio recording or streaming during a meeting requires a resolution of Council in advance of the meeting.
  - 3.9. All cell phones and electronic devices not required for conducting the meeting shall be turned off or turned to a silent mode.
- 4. Council Meetings
  - 4.1 Inaugural Meeting

Inaugural Meetings shall be held on the first Thursday of the new term of Council Monday in December following a Regular Municipal Election at 7:00 pm. In case of inclement weather, the Inaugural Meetings shall be held on the first suitable day following, at the same hour, and Notice shall be given on the Municipal website and posted at the Municipal Office.

4.2. Regular Meetings

All meetings of Council, its Committees and local boards are open to the public except as provided in the *Municipal Act*, Section 239.

4.2.1. Location

Meetings of Council shall be held in the Council Chambers in the Municipal Building in the West Elgin Community Complex located at 22413 Hoskins Line, Rodney 160 Main Street, West Lorne, unless otherwise decided by Resolution of Council or as provided for in the *Municipal Act, 2001* when Notice is given. *Attendance may be by electronic participation.* 2021-04

4.2.2. Alter Time, Day or Place

Council may, by Resolution, alter the time, day or place of any future Council and/or Council Committee Meeting.

4.2.3. Postponement of Meetings

Any regular meetings of the Council may be postponed to a day named in:

- a) A resolution of Council passed by the majority of Members; or,
- b) A notice by the Clerk as deemed necessary by the Clerk and Mayor, due to inclement weather or emergency, and Notice shall be given by the Clerk on the website and posted at the Municipal Office and directly to the Members.
- 4.2.4. Meeting Schedule
  - a) Prior to the 31<sup>st</sup> of December in each year first meeting in each calendar year, the Council shall establish a schedule of all regular Council meeting dates for the calendar year. This Calendar shall be posted on the Municipal Website. Except as otherwise noted on the meeting schedule, meetings shall generally be held on the second and fourth Thursday of the month at 9:30 a.m. except for July, August and December. Council will meet the 3rd Thursday in July, the 2nd Thursday in August and the 3rd Thursday in December. Council may by resolution, alter the date and/or time of a regular meeting when deemed necessary, provided that notice is given pursuant to this by-law. When a meeting is scheduled on a Public Holiday, it shall be held on the next business day at the same hour.
  - b) The meeting curfew shall be 4:00 p.m. on the published day of the meeting three hours from the published start time of the meeting. Council may by resolution, proceed past the curfew for up to one hour, in order to proceed past the one-hour extension the unanimous consent of Members present shall be required.
  - c) The Committee of Adjustment shall meet when required in conjunction with Regular Council meetings.
  - d) Committee-of-the-Whole meetings shall be scheduled on an as needed basis by resolution of Council or set as part of the annual meeting calendar.

4.2.5. Procedure for electronic participation is as follows:

- 4.2.5.1. The Chair shall read off each item on the agenda and canvas each member if they wish to speak on this item.
- 4.2.5.2. The Chair or Clerk at Chair's request shall read the recommendation and the Chair shall call for a mover. The mover shall state his or her name and position.
- 4.2.5.3. The Chair shall call for a seconder for the recommendation. The seconder shall state his or her name and position.
- 4.2.5.4. The Chair shall canvas each member on their vote of ayes or nays.
- 4.2.5.5. The Chair may choose to call for a recorded vote during an electronic participation meeting, if in the opinion of the Chair technical difficulties have arisen and they are unable to count the votes by a simple show of hands. 2021-04
- 4.2.6. Order of Business
  - 4.2.5.1. The Agenda for each Meeting shall be prepared by the CAO/Clerk or designate. The order of the proceedings shall be as follows, or as otherwise determined by the CAO/Clerk or designate:
- 1. Call to Order

- 2. Adoption of Agenda
- 3. Closed Session
- 4. Report from Closed Session
- 5. Disclosure of Pecuniary Interest
- 6. Public Meeting
- 7. Delegations
- 8. Minutes
- 9. Business Arising from Minutes
- 10. Consent Agenda
- 11. Staff Reports
- 12. Committee and Board Reports
- 13. Accounts
- 14. Consideration of Items Requiring Discussion
- 15. Council Inquires/ Announcements

16.By-Laws

- 17. Confirming By-Law
- 18. Adjournment

## 4.2.5.2 The Consent Agenda will include the following items:

- a) Communications from other Municipalities
- b) Procurement items that are within the approved budget
- c) Monthly Staff information reports
- d) Items as directed by the CAO, Clerk or Mayor
- i. Questions of clarification may be asked by Members about any consent item during the adoption of the Consent Agenda without requiring a separate vote.
- ii. Members may request that a matter be removed from the Consent Agenda to be dealt with under Consideration of Items Requiring Discussion (Regular Agenda).
- iii. In the event that a Member declares pecuniary interest on an item that is included on the Consent Agenda, that item shall be considered under Consideration of Items Requiring Discussion.
- iv. The Consent Agenda shall be adopted by a single motion.
- 4.2.5.3 At each duly constituted Regular Meeting of Council, the Minutes of the preceding Regular Meeting, Public Meeting and any Special Meeting shall be adopted by resolution of Council, subject to the correction of errors and omissions, and signed by the Mayor and the Clerk.
- 4.2.5.4 The order of business of each Meeting shall be taken up in the order in which it stands in the Agenda, unless otherwise decided by a majority vote of the Members present.

A motion changing the order of business shall not be amendable or debatable.

4.2.5.5 Amendments to the Agenda - Deadline

The deadline for receipt of added materials by the Clerk for addition to the regular Council Agenda shall be 12 noon on the business day prior to the Council Meeting.

## 4.3. Special Meetings

- 4.3.1 The Head of Council may at any time call a Special Meeting of Council.
- 4.3.2 Upon receipt of a petition or a resolution of the majority of the Members of the Council, the Clerk shall summon a Special Meeting for the purpose and at the time mentioned in the petition. A resolution of Council shall be deemed to be a petition.
- 4.3.3 The only business to be dealt with at a Special Meeting is that which is listed in the Notice of the meeting.
- 4.3.4 The calling of a Special Meeting shall be in accordance with the Notice provisions in Section 5 of this by-law.

- 4.3.5 As per Section 238 (3.1) of the Municipal Act, S.O. 2001, members of Council are permitted to attend a Special meeting of Council through electronic means and still be counted towards quorum. 2021-04
- 4.3.6 Procedure for electronic participation is as follows:

The Chair shall read off each item on the agenda and canvas each member if they wish to speak on this item.

The Chair shall read the recommendation and call for a mover. The mover shall state his or her name and position.

The Chair shall call for a seconder for the recommendation. The seconder shall state his or her name and position.

The Chair shall canvas each member on their vote of ayes or nays.

The Chair may choose to call for a recorded vote during an electronic participation meeting, if in the opinion of the Chair technical difficulties have arisen and they are unable to count the votes by a simple show of hands. 2021-04

4.4. Public Statutory Meetings

Public Statutory Meetings shall correspond with the scheduled time of a Regular Council meeting.

- 4.5. Closed Session
  - 4.5.1 All meetings of Council shall be open to the public except as provided for in Section 239(2), Section 239(3) and Section 239(3.1) of the Act and set out in Appendix B to this by-law.
  - 4.5.2 Before holding a meeting or part of a meeting that is to be closed to the public, Council shall state by resolution the fact of holding a Closed Session and the general nature of the matter to be considered at the Closed Session; or in the case of a meeting that is an educational or training meeting, the fact of holding a Closed Session, the general nature of its subject matter and that it is to be closed as an education or training meeting.
  - 4.5.3 As provided in Section 239(5), subject to Subsection (6), a meeting shall not be closed to the public during the taking of a vote except if it is for a procedural matter or for giving directions or instructions to officers, employees or agents of the agents of the municipality, local board or committee of either of them or persons retained by or under a contract with the municipality or local board.
  - 4.5.4 When a Closed Session is necessary, it shall be a requirement that the minutes shall be prepared without note or comment and shall be approved at the next scheduled Closed Session.
  - 4.5.5 Confidential copies of all documents and reports shall be distributed to Council Members prior to the Closed Session.
  - 4.5.6 The Clerk shall be responsible for maintaining a confidential copy of all documents/reports distributed, relating to a Closed Session and for keeping confidential minutes of all Closed Sessions.
  - 4.5.7 Members and Staff shall respect the confidentiality of all matters disclosed to them and materials provided to them during Closed Sessions.
  - 4.5.8 As per Section 238 (3.1) of the Municipal Act, S.O. 2001, members of Council are permitted to attend a Closed Session of Council through electronic participation and still be counted towards quorum. 2021-04
- 5. Notice of Meetings

The notice requirements set out in this by-law are minimum requirements only and the Clerk may provide notice in an extended manner if, in the opinion of the Clerk, the extended manner is reasonable and necessary in the circumstances.

Any Notice usually posted on the municipal website shall be posted at the Municipal Office in the event that the website is unavailable.

Lack of receipt of Notice by any Member of Council shall not affect the validity of holding a meeting nor any action taken at a meeting.

- 5.1 Notice Regular Meetings
  - 5.1.1 At the beginning of each year, the meeting schedule shall be posted on the municipal website. In the event that the website is unavailable the meeting schedule shall be posted at the Municipal Office. The posting of the meeting schedule shall constitute Notice for all Council meetings. A note shall be placed on the meeting schedule to advise the public that the schedule is subject to change and the posted schedule shall be revised should a meeting time, date and/or location be changed.
  - 5.1.2 In addition to section above, Notice of Council meetings shall be given by publication of the date and time of the next scheduled meeting in meeting minutes and the posting of meeting agendas on the municipal website prior to the meeting. The posted agenda shall also be considered as Notice of regular meetings of Council. The agenda shall include the date and time of the meeting.
  - 5.1.3 The Clerk shall ensure that Notice of each Regular Meeting of Council is provided to the Members of Council and the public at least forty-five (45) hours in advance of said meeting.
  - 5.1.4 The agenda for each Regular Meeting of Council shall be available forty-five (45) hours prior to the meeting.
- 5.2. Notice Special Meetings

The Clerk shall ensure that Notice of each Special Meeting of Council is provided to the Members of Council and the public at least forty-five (45) hours in advance of the said meeting.

5.3. Notice - Emergency Meetings

Notwithstanding any other provision by this by-law, an Emergency Meeting may be held without written Notice, to deal with an emergency.

5.4. Notice - Change in Meeting Schedule

The Clerk shall provide Notice of cancellation of a meeting to Council, staff, the local media and all other known interested parties in advance of a meeting. Notice of cancellation of a meeting to the above shall be provided in a manner deemed to be effective and appropriate given the circumstance. The public shall receive Notice by posting on the municipal website and/or by posting Notice on the entrance doors location at the municipal office; or in the event that the meeting is being held at another location, the entrance door of the meeting location.

- 6. Communications, Delegations & Petitions
  - 6.1. The deadline for the receipt of communication, delegations, or petition by the Clerk for inclusion on the Agenda shall be 9 am noon, on the Thursday Monday prior to the Regular Meeting of Council. A written or electronic copy or their presentation and purpose of the delegation must be included.
  - 6.2. The maximum number of delegations to be heard by Council in any one meeting shall be limited to two (2). Delegations shall be scheduled by the Clerk in accordance with the sequence of delegation requests, complete with information, received.

- 6.3. Every petition, remonstrance, or other written application intended to be presented to the Council must be fairly written or printed and signed by at least one person.
- 6.4. Communications and petitions addressed to the Mayor and Council shall be listed on the Agenda or included in a Council Information Package.
- 6.5. Communications or petitions containing obscene or defamatory language shall not be listed on the Agenda but shall be held by the Clerk and may be directed to the police for investigation.
- 6.6. Persons desiring to verbally present new information on matters of fact or make a request of Council shall contact the Clerk to make a timed delegation at Council.
- 6.7. Delegations not providing sufficient notice may be heard at the discretion of a majority of Members of Council present.
- 6.8. Delegations shall be limited in speaking to not more than ten (10) minutes in total per person, per group or per organization. A delegation consisting of five or more Members shall be limited to two (2) speakers.
- 6.9. Council may refuse to hear delegations when, in the opinion of Council, the subject of the presentation is beyond the jurisdiction of the Municipality.
- 6.10. Any person/organization shall be limited to two (2) delegations in a calendar year on the same subject matter.
- 6.11. No person shall be permitted to address Council with respect to a specific personal issue, nor shall a brief respecting such issue be listed on a Council Agenda. A written brief by any person with respect to personal issues may be forwarded to the Clerk for consideration by Council in Closed Session.
- 6.12. No person shall be permitted to address Council relating to any current litigation matters of which the Municipality is a party to the proceedings.

## 7. Minutes

- 7.1. The Municipal Clerk or person designated by the Clerk shall record without note or comment all resolutions, decisions and other proceedings at a meeting of the body, whether it is closed to the public or not. The minutes, in the case of the meeting of a local board or committee, shall be recorded by the Clerk or the person designated by the Clerk.
- 7.2. Minutes of the Council or Committee, whether it is closed to the public or not, shall record:
  - 1) The date of the meeting;
  - 2) The record of the attendance of the Members;
  - 3) Disclosures of pecuniary Interest and the general nature thereof;
  - 4) Adoption of the minutes of prior meeting(s);
  - 5) All resolutions and decisions;
  - 6) All the other proceedings of the meeting without note or comment;
  - 7) Time of call to order, time of adjournment and time in and out of Closed Session, if any, or any Committee meeting.
- 7.3. A resolution to adopt the minutes of a prior meeting may include the correction of any errors or omissions.
- 7.4. Adopted minutes shall be signed by the presiding officer and by the Clerk, or person designated by him, that recorded the said minutes.
- 8. Commencement Of Meetings
  - 8.1. The Mayor shall call the meeting to order as soon after the hour fixed for a meeting as a quorum is present.

- 8.2. If there is no quorum present within fifteen minutes after the time appointed for the Meeting, the Council shall stand adjourned until the date and time of the next Regular or Special Meeting and the Clerk shall record the names of the Members present upon such adjournment.
- 8.3. The Mayor, if present, shall preside at all meetings.
- 8.4. The Deputy Mayor shall preside during the Meeting or until the arrival of the Mayor in the absence of the Mayor
- 8.5. In the absence of the Mayor and the Deputy Mayor, the Clerk shall call the Meeting to order fifteen minutes after the hour appointed for the Meeting, and the Members shall appoint a Member by resolution to preside during the Meeting or until the arrival of the Mayor or the Deputy Mayor.
- 8.6. Council shall recess for a period of five minutes if at any meeting the number of members is reduced to less than a quorum. The meeting shall stand adjourned if quorum is not achieved, subject to the provisions of the *Municipal Conflict of Interest Act*.
- 9. Role of the Mayor as Head of Council and Role of Council
  - 9.1. The roles of the Mayor and of Council shall be as per the Municipal Act, as amended, outlined in Appendix "A" attached to this by-law.
  - 9.2. When presiding over Council meetings, the Head of Council shall:
    - a) Open the meeting of Council by taking the chair and calling the Members to order;
    - b) Announce the business before the Council in the order in which it is to be acted upon;
    - c) Receive and submit, in the proper manner, all motions presented by the Members of Council;
    - Put to vote all questions which are regularly moved and seconded, or necessarily arise in the course of proceedings, noting ayes and nays, and to announce the result;
    - e) Vote on motions;
    - f) Decline to put to vote motions that infringe the rules of procedure;
    - g) Restrain the Members, within the rules of order, when engaged in debate;
    - h) Enforce on all occasions the observance of order and decorum among the Members;
    - i) Receive all messages and other communications and announce them to the Council;
    - j) Authenticate, by his signature when necessary, all by-laws, resolutions, and minutes of the Council;
    - k) Inform the Council, when necessary or when referred to for the purpose, on a point of order or usage;
    - I) Represent and support the Council, declaring its will, and implicitly obeying its decision in all things;
    - m) Adjourn the meeting when the business is concluded;
    - n) Adjourn the meeting without question in the case of grave disorder arising in the Council Chamber.
- 10. Rules of Conduct
  - 10.1. No Member shall:
    - a) Speak disrespectfully of the reigning sovereign, or any of the Royal Family, or of the Governor-General, the Lieutenant Governor, or any person administering the government of the Dominion of Canada, the Province of Ontario or of The Corporation of the Municipality of West Elgin.
    - b) Use indecent, offensive or insulting language.
    - c) Speak on any subject matter other than the subject in debate.
    - d) Disturb the Council by any disorderly conduct.
    - e) Speak disrespectfully of any Council Member or employee of the Municipality of West Elgin.

- 10.2. A Member shall not disobey the rules of the Council or a decision of the Mayor or of the Council on points of order or on the interpretation of the rules of procedure of the Council.
- 10.3. A Member shall not leave his seat or make any noise or disturbance while a vote is being taken or until the vote is declared.
- 10.4. A Member shall not interrupt a Member who is speaking, except to raise a point of order or a question of privilege.
- 10.5. In addition to powers granted by Section 241(2) of the *Municipal Act*, as amended, in the event that a Member persists in a breach of the Rules of this By-Law, after having being called to order by the Mayor, the Mayor may put the question "Shall the Member be ordered to leave his seat for the duration of the Meeting?" and such question is not debatable.
- 10.6. If the Council decides the questions set out in Section 10.5 of this by-law in the affirmative by a majority vote of the Members present, the Mayor shall order the Member to leave his seat for the duration of the Meeting.
- 10.7. If the Member apologizes, the Mayor, with the approval of the Council, may permit the Member to resume his seat.
- 11. Rules of Debate
  - 11.1. The Mayor shall preside over the conduct of the Meeting including the preservation of good order and decorum, ruling on points of order and deciding all questions relating to the orderly procedure of the Meeting, subject to an appeal to the Council.
  - 11.2. The Mayor may answer questions and comments in a general way without leaving the chair, but if he wishes to make a motion or to speak on a motion taking a definite position and endeavoring to persuade the Council to support that position, then he shall first leave the chair.
  - 11.3. If the Mayor desires to leave the chair for the purpose of taking part in the debate or for any other reasons, the Deputy Mayor shall sit in his place until the Mayor resumes the chair.
  - 11.4. Before a Member may speak to any matter, he shall first be recognized by the Mayor or Chair.
  - 11.5. When two or more Members indicate simultaneously that they wish to speak, the Mayor shall name the Member who is to speak first.
  - 11.6. When a Member is speaking to a motion, he shall confine his remarks to the motion and in speaking shall be limited to a maximum of five (5) minutes, unless otherwise decided by a majority vote of the Members present.
  - 11.7. A Member shall not speak more than twice to any motion unless otherwise decided by a majority vote of the Members present, except the Member who made a motion who shall be allowed to reply for a maximum of five (5) minutes.
  - 11.8. When a motion is under debate, a Member may ask a concisely worded question of another Member or a Staff Member through the Mayor prior to the motion being put to a vote by the Mayor.
  - 11.9. A Member may require the motion under debate to be read at any time during the debate, but not so as to interrupt a Member who is speaking.
  - 11.10. No Member shall speak more than once on an item of business until every Member who desires to speak has spoken.
- 12. Questions of Privilege and Order
  - 12.1. If a Member believes that his rights, privileges or integrity or those of the Members collectively have been prejudicially affected, he shall ask leave of the Mayor to

raise a question of privilege which shall take precedence over all other matters, but he shall not be permitted to enter into any argument or introduce any motion related to the question of privilege.

- 12.2. No Member shall impugn the integrity of municipal staff. When a member considers that the integrity of a municipal staff member has been impugned or questioned the member may raise it as a point of order and the Mayor shall permit the Clerk to make a statement.
- 12.3. When a Member desires to call attention to a violation of the Rules of Procedure, he shall ask leave of the Mayor to raise a point of order and after leave is granted, he shall state the point of order to the Mayor succinctly and the Mayor shall then decide upon the point of order and advise the Members of his decision.
- 12.4. Unless a Member immediately appeals the Mayor's decision to the Council, the decision of the Mayor shall be final.
- 12.5. If the decision of the Mayor is appealed to the Council, then the question "Shall the ruling of the Chair be sustained?" shall be put immediately without debate and its result shall be final.
- 12.6. When the Mayor calls a Member to order, that Member shall cease speaking until the point of order is dealt with and that Member shall not speak again to the matter under discussion without the permission of the Mayor unless to appeal the ruling of the Mayor.

#### 13. Motions

- 13.1. All new motions shall be submitted in writing with the exception of procedural motions which may be verbally presented. Oral motions shall be restated by the Chair before debate or a vote.
- 13.2. Any Member of Council may give notice of intent that he shall introduce a motion at the next, or at a subsequent meeting of Council to introduce a new matter or initiate any measure to make any change in the Council's established policy. The giving of notice requires no seconder and is not at that time debatable.
  - a) A Member may introduce a motion at a meeting regarding a matter that would not otherwise be considered by Council or a Committee at such meeting in writing, at a regular Council or Committee meeting, or by submission to the Clerk to be included in the Agenda, but it shall not be debated until the next regular meeting;
- 13.3. The Clerk or Recording Secretary, upon receipt of a Notice of Motion in accordance with Section 13.2. shall print the motion, including the name of the mover or seconder in full on the Agenda for the next regular meeting of the Council or the Committee.
- 13.4. A Notice of Motion does not require a seconder to be included in the Agenda.
- 13.5. A Notice of Motion shall not be considered or otherwise disposed of by Council or the Committee unless the mover of the motion is in attendance at the meeting.
- 13.6. All Notices of Motion shall be in writing, signed by the mover and filed with the Clerk.
- 13.7. Notices of Motions filed with the Clerk shall be directed to the next Regular Council Meeting unless a subsequent meeting is specified.
- 13.8. Motions shall be moved and seconded before being debated or put to a vote.
- 13.9. Every motion shall be deemed to be in the possession of the Council for debate after it is received by the Mayor, but may, with the permission of the Council, be withdrawn at the joint request of the mover and seconder at any time before the motion is disposed of.
- 13.10. When a motion is under debate, no other motion shall be in order except a motion:

- a) To adjourn;
- b) To proceed beyond curfew;
- c) To defer;
- d) To call the question (close the debate);
- e) To refer;
- f) To amend.
- 13.11. A motion to adjourn shall:
  - a) Not be amended;
  - b) Not be debated;
  - c) Not include qualifications or additional statements; and
  - d) Always be in order except when a Member is speaking or the Members are voting or when made in Committee-of-the-Whole.
- 13.12. When a motion to adjourn has been decided in the negative, no further motion to adjourn shall be made until after some subsequent proceeding has taken place.
- 13.13. The Council shall always adjourn when there is no business before it.
- 13.14. A motion to proceed beyond the hour of curfew shall:
  - a) Not be amended;
  - b) Not be debated; and
  - c) Shall always be in order, except when a Member is speaking or the Members are voting.
- 13.15. A motion to table/defer an agenda item shall:
  - a) Be amendable only to the date;
  - b) Not be debated;
  - c) Apply to the main motion and any amendments thereto under debate at a time when the motion to table was made;
  - d) Not include qualifications or additional statements.
- 13.16. If a motion to table/defer is decided in the affirmative by a majority vote of the Members present, then the main motion and any amendments thereto shall be removed for the Council's consideration until such time as a notice of motion to lift the matter from the table is filed with the Clerk. A motion to take from the table is not debatable or amendable.
- 13.17. A motion to call the question (close the debate) shall:
  - a) Not be amended;
  - b) Not be debated;
  - c) Apply to the motion or amendment under debate at the time when the motion to put the question is made;
  - d) Not be received in any Committee;
  - e) Be moved using the words "That the question now be called."
- 13.18. If a motion to call the question is decided in the affirmative by a majority vote of the Members present, then the preceding motion or amendment shall be voted on immediately without further debate or comment.
- 13.19. A motion to refer a matter under consideration to a Committee or the Administration or elsewhere shall:
  - a) Be open to debate;
  - b) Be amendable; and,
  - c) Preclude amendment or debate of the preceding motion, unless the motion to refer is resolved in the negative, in which case the preceding motion shall be open to debate and amendment.

A motion to amend shall:

a) Be open to debate;

- b) Not propose a direct negative to the main motion;
- c) Be relevant to the main motion; and
- d) Not be further amended more than once.

#### 11. Voting Procedures

- 11.1. Voting on the main motion and amending motions shall be conducted in the following order:
  - a) A motion to amend a motion to amend the main motion;
  - b) A Motion (as amended or not) to amend the main motion;
  - c) The main motion (as amended or not).
- 11.2. When the motion under consideration contains two distinct propositions, upon the request of any Member, the Mayor or Chair shall divide the question and the vote upon each proposal shall be taken separately. The mover and seconder shall remain the same for both motions.
- 11.3. A motion shall be put to a vote by the Mayor immediately after all Members desiring to speak on the motion have spoken in accordance with Section 11.7. of this By-Law.
- 11.4. After a motion is put to a vote no Member shall speak on that motion, except to request a recorded vote. No other motion shall be made until after the result of the vote is announced.
- 11.5. Every Member present at a Council Meeting when a question is put shall vote thereon, except where he is disqualified to vote by reason of a pecuniary interest or is absent from the Council Chamber when the question is put.
- 11.6. Every Member who is not disqualified from voting by reason of a declared pecuniary interest shall be deemed to be voting against the motion if he declines or abstains from voting.
- 11.7. All votes shall be by show of hands, except when a recorded vote is requested. The manner of determining the decision of the Council on a motion shall not be by secret ballot or by any other method of secret voting.
- 11.8. The Mayor shall announce the result of every vote after requesting both ayes and nayes. The Clerk shall record the vote.
- 11.9. When there is a tie vote on any motion, it shall be deemed to have been decided in the negative.
- 11.10. When called for by any Member or when required by law, a recorded vote shall be taken by the Clerk in random order and the results shall be declared by the Clerk.
- 11.11. A Member may call for a recorded vote prior to or immediately after the taking of the vote.
- 11.12. When a recorded vote is taken, the names of those who voted for and against the motion shall be entered in the minutes.
- 11.13. In any vote required of the Whole Council, the number of Members constituting the Council shall be determined by excluding:
  - a) The number of Members who are present at the Meeting but who are excluded by voting by reasons of the Municipal Conflict of Interest Act;
  - b) The number of seats that are vacant on the Council by reasons of Section 259 of the Municipal Act.
- 12. Reconsideration
  - 12.1. A motion to reconsider a decided matter within the term of Council shall only be introduced by a Member who voted with the majority on the original motion. Before

accepting a motion to reconsider, the Mayor may ask the Member to confirm that he voted with the majority on the issue in question.

- 12.2. No debate on a motion to reconsider a decided matter shall be permitted; however, the mover of a motion to reconsider may provide or may make a brief and concise statement outlining the reasons for proposing such reconsideration.
- 12.3. No motion for reconsideration of any decided matter shall be permitted more than once during a period of twelve months following the date on which the question was decided.
- 12.4. If a motion to reconsider is decided in the affirmative at a meeting, then consideration of the original matter shall become the next order of business.
- 13. Enactment of By-Laws
  - 13.1. The Clerk shall ensure that by-laws are prepared and placed on the agenda. Every by-law when introduced shall be in typewritten form and shall contain no blanks except such as may be required to confirm to accepted procedure or to comply with provisions of any Act and shall be complete.
  - 13.2. Every By-law shall receive three separate readings before being passed.
  - 13.3. The first, second, and the third and final reading for all by-laws addressed in a single motion, without amendment or debate. By-laws may be addressed in a consent agenda, with the vote to be carried out in the By-law portion of the agenda.
  - 13.4. By-laws may be given all three readings at the same meeting, except when requested otherwise by a motion passed by the majority of the Members present or as otherwise provided in law.
  - 13.5. Every by-law enacted by the Council shall be numbered and dated, and shall be, sealed with the seal of the Corporation, and signed by the Mayor or presiding officer and the Clerk and shall be deposited in the vault by the Clerk for safekeeping.

## 14. Committees

14.1. Procedure:

A committee shall conform to the rules governing protocol and procedures for Council meetings, unless otherwise noted herein.

All committees shall be bound by Closed Session provisions set out in this by-law.

- 14.2. Establishment-Appointment:
  - 17.2.1 Council may establish Council Committees to help support it's work. Council shall set the mandate for each Council Committee by resolution or by-law.
  - 17.2.2 The names of Members required to serve on the Council Committees, Boards, Commissions or other bodies to which Council is required or empowered to appoint persons, shall be determined by Council.
  - 17.2.3 Council may appoint Members to any Local Boards or Council Committees to act in the place of any Members thereof who, by reason of illness or absence from the Municipality, are unable to attend the meetings of the Council Committees or who resign before their terms of office have expired.

#### 14.3. Local Boards:

Council shall appoint members to Local Boards as requires by statute. Members are appointed to Local Boards by Council by by-law or resolution.

14.4. Standing Committees:

Standing Committees of Council are committees that consist of at least 50% of the membership consisting of Members of Council, which are appointed by Council by by-law.

14.5. Council Advisory Committees:

The duties of Advisory Committees created by Council shall be to report and to make recommendations to Council on all matters relating to their terms of reference or that have been referred to them. Advisory Committees shall generally have one representative appointed from Council.

14.6. Special Purpose Committees:

The duties of Special Purpose Committees, appointed by Council By-Law or Resolution, shall report to Council on any matters relating to their terms of reference or that have been referred to them.

14.7. Mayor-Ex-officio:

The Mayor is an ex-officio Member of every Council Committee.

The Mayor may vote and otherwise participate without any restriction in the business of the Committee on the same basis as any other Committee Member, but shall not be counted in quorum for the Committee.

14.8. Terms of Reference:

Subject to the provision of any general or special Act, the Council, in establishing any Council Committee, shall set forth terms of reference and such other provisions as the Council deems proper.

Council may consider any matter without referring it to a Council Committee or may refer it to one or more committees or refer it to the Committee-of-the-Whole Meeting, and may withdraw a matter from a Council Committee whether or not the Council Committee has entered into consideration.

14.9. Quorum:

A majority of the Members of a Council Committee shall be a quorum.

14.10. Committee Chair:

Annually, each Committee at its first meeting shall appoint a Committee Chair and Committee Vice-Chair from among its Members, unless otherwise specified in the Council Committee's Terms of Reference. Each Committee shall have the authority to alter the time of its meetings and to hold special meetings. Notice of Council Committee meetings shall be given by the Clerk in accordance with this by-law.

14.11. Attendance:

Members of Council may attend meetings of any Advisory Committee of which they are not Members, but shall not have the privilege of voting and may not address the Committee without the permission of the Chair.

14.12. Minutes:

The Minutes of all Council Committees shall be recorded according to the process set out in this by-law, and forwarded to Council to be received as information. The Clerk, Deputy Clerk or a person delegated by the Clerk in writing shall be the recording secretary for all Standing Committees of Council. 18. Disclosures of Pecuniary Interest and General Nature Thereof

Members shall be required to comply with and disclose as required by the Conflict of Interest Act.

19. Mayor and Councillor Comments and Announcements

The Mayor and Councillor Comments and Announcements section of the agenda is for the purpose of providing information only. Comments are not debatable, nor shall they introduce new business. Comments shall be limited to five (5) minutes per Member.

20. Confirming By-Law

The proceedings at every Regular and Special Meeting shall be confirmed by By-Law so that every decision of the Council at the previous Regular Meeting and any Special Meetings and every Resolution passed thereat 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.

21. Validity and Severability

If any section, subsection, clause, paragraph or provision of this by-law be declared by a court of competent jurisdiction to be invalid, unenforceable, illegal or beyond the powers of Council to enact, the same shall not affect the validity or enforceability of any other provision of this by-law or of the by-law as a whole.

22. Accessibility of Documents

Documents are available in alternate formats upon request from the Clerk.

23. Enactment

THAT By-Laws 2007-12, 2010-06, 2011-13 and 2013-70 are hereby repealed.

THAT this By-Law shall come into force and take effect on the date of its final passing.

Read a first and second time this 14<sup>th</sup> day of June, 2018.

Bernie Wiehle, Mayor

Genevieve Scharback, CAO/Clerk

Read a third time and finally passed this 28<sup>th</sup> day of June, 2018.

Bernie Wiehle, Mayor

Genevieve Scharback, CAO/Clerk

## Appendix A to By-Law 2018-43

Municipal Act, 2001, as amended, sections 224 to 226

- 224. Role of Council It is the role of Council,
  - a) To represent the public and consider the well-being and interests of West Elgin;
  - b) To develop and evaluate the policies and programs of West Elgin;
  - c) To determine which services West Elgin provides;
  - d) To ensure that administrative policies, practices and procedures and controllership policies, practices and procedures are in place to implement the decisions of Council;
     d.1) To ensure the accountability and transparency of the Municipality's operations, including the activities of the senior management of the municipality;
  - e) To maintain the financial integrity of the Municipality; and,
  - f) To carry out the duties of Council under any Act.
- 225. Role of Head of Council It is the role of the head of council,
  - a) To Act as Chief Executive Officer of the Municipality;
  - b) To preside over Council meetings so that its business can be carried out efficiently and effectively;
  - c) To provide leadership to Council;
     c.1) without limiting clause c), to provide information and recommendations to the Council with respect to the role of council described in clauses 224 d) and d.1);
  - d) To represent the municipality at official functions; and
  - e) To carry out the duties of the Head of Council under any Act.
- 226. As Chief Executive Officer of the West Elgin, the Head of Council shall:
  - a) Uphold and promote the purposes of the Municipality;
  - b) Promote public involvement in the Municipality's activities;
  - c) Act as the representative of West Elgin both within and outside the municipality and promote the Municipality locally, nationally and internationally; and
  - d) Participate in and foster activities that enhance the economic, social and environmental well-being of the County and its residents.

## Appendix B to By-Law 2018-43

Municipal Act, 2001, section 239(1), 239(2) and 239(3)

- 239. (1) Except as provided in this section, all meetings shall be open to the public.
  - (2) A meeting or part of a meeting may be closed to the public if the subject matter being considered is,
    - (a) the security of the property of the municipality or local board;
    - (b) personal matters about an identifiable individual, including municipal or local board employees;
    - (c) a proposed or pending acquisition or disposition of land by the municipality or local board;
    - (d) labour relations or employee negotiations;
    - (e) litigation or potential litigation, including matters before administrative tribunals, affecting the municipality or local board;
    - (f) advice that is subject to solicitor-client privilege, including communications necessary for that purpose;
    - (g) a matter in respect of which a council, board, committee or other body may hold a closed meeting under another Act;
    - (h) information explicitly supplied in confidence to the municipality or local board by Canada, a province or territory or Crown agency of any of them;
    - (i) a trade secret or scientific, technical, commercial, financial or labour relations information, supplied in confidence to the municipality or local board, which, if disclosed, could reasonably be expected to prejudice significantly the competitive position or interfere significantly with the contractual or other negotiations of a person, group of persons, or organization;
    - ( j) a trade secret or scientific, technical, commercial or financial information that belongs to the municipality or local board and has monetary value or potential monetary value; or
    - (k) a position, plan, procedure, criteria or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of the municipality or local board.
  - (3) A meeting or part of a meeting shall be closed to the public if the subject matter being considered is,
    - (a) a request under the *Municipal Freedom of Information and Protection of Privacy Act*, if the council, board, commission or other body is the head of an institution for the purposes of that Act; or
    - (b) an ongoing investigation respecting the municipality, a local board or a municipally-controlled corporation by the Ombudsman appointed under the Ombudsman Act, an Ombudsman referred to in subsection 223.13 (1) of this Act, or the investigator referred to in subsection 239.2 (1).
  - (3.1) A meeting of a council or local board or of a committee of either of them may be closed to the public if the following conditions are both satisfied:
    - 1. The meeting is held for the purpose of educating or training the members.
    - At the meeting, no member discusses or otherwise deals with any matter in a way that materially advances the business or decision-making of the council, local board or committee.



#### Staff Report

Report To:	Council Meeting
From:	Jana Nethercott, Clerk
Date:	2022-06-23
Subject:	Integrity Commissioner/Closed Meeting Investigator/Ombudsman

#### Recommendation:

That West Elgin Council hereby receives the report from Jana Nethercott, Clerk re: Integrity Commissioner/Closed Meeting Investigator/Ombudsman for information purposes; and

That West Elgin partner with the County of Elgin and interested Local Municipal Partners in the Joint RFP to secure a new service provider to fulfill the transparency and accountability roles of Integrity Commissioner, Closed Meeting Investigator and Municipal Ombudsman.

#### Purpose:

The purpose of this report is to inform Council that Independent Resolutions Inc., through its representative Mark McDonald, has provided notice to the County of Elgin and its Local Municipal Partners as of September 30, 2022.

The Municipal Act, 2001 requires that all municipalities have an Integrity Commissioner.

#### Background:

Bill 68, Modernizing Ontario's Conflict of Interest Act was introduced on November 16, 2016 and advanced through the legislative process requiring municipalities implement requirements for codes of conduct, conflict of interest and integrity commissioner services by March 2019.

In October 2017, a Request for Proposal (RFP) was jointly issued by Elgin County and Middlesex County seeking an Integrity Commissioner, Closed Meeting Investigator and Ombudsman. Elgin County's Municipal Partners were invited to participate in this agreement. Through Council resolution, the Township chose to utilize the service of Independent Resolutions Inc., represented by Mark McDonald for these services. The original agreement term was set to expire ending on December 31, 2020 and was extended for another two years to expire on December 31, 2022. Mark McDonald recently provided notice, in conformance with the requirements of the Agreement, that Independent Resolutions Inc. will no longer provide services to County and Municipal Partners after September 30, 2022.

Combining the transparency and accountability of these three roles: Integrity Commissioner, Closed Meeting Investigator, and Municipal Ombudsman, will provide one point of contact for Council, members of the public, and staff.

#### Integrity Commissioner

The Integrity Commissioner is an independent accountability officer given authority under the *Municipal Act, 2001*, including Ontario Regulation 55/18 Codes of Conduct and the *Municipal Conflict of Interest Act, 1990*. Municipalities are required to at all times have an Integrity Commissioner. The Integrity Commissioner is responsible for administering relevant portions of Council's Code of Conduct. This includes conducting investigations in an independent manner, in accordance with the accountability and transparency provisions of the *Municipal Act, 2001* and the Council Code of Conduct Policy, for both Council and Boards.

The Integrity Commissioner has a statutory right to delegate tasks to qualified person(s) which may include the provision of legal advice, particularly where the Integrity Commissioner is not licensed to practice law.

#### **Closed Meeting Investigator**

The Closed Meeting Investigator is responsible for investigating complaints relative to Section 239.2 of the *Municipal Act, 2001*, in an independent manner, as to whether the municipality has complied with the open meeting requirements of the *Municipal Act, 2001* or a Municipal Procedural By-Law in respect of a meeting or part of a meeting that was closed to the public. The Closed Meeting Investigator's duties include reporting on the investigation.

#### **Municipal Ombudsman**

The Municipal Ombudsman is responsible for investigating and reporting to Council in an independent manner on any decision or recommendation made or act done or omitted in the course of the administration of the municipality and its local boards in accordance with section 223.13(1-2) of the Act. The Act designates the Ombudsman as the default investigator for municipalities that have not appointed their own.

The County will take the lead in developing a joint RFP for Elgin County and interested Local Municipal Partners. The County will take the lead in developing and issuing the RFP in consultation with participating LMPs. In addition to creating a workflow efficiency on behalf of local municipalities who are interested in this approach, a jointly issued RFP for multiple participating municipalities is likely to provide a greater response to the RFP. Jointly retained services will also support our efforts to maintain similar standards for service throughout Elgin County.

The successful proponent(s) to the RFP would be required to execute separate agreements with each LMP. The previous agreements included a retainer that was covered by the County and each LMP was responsible for the payment of the hourly rate on an as needed basis, and it is anticipated that a similar arrangement will continue with a new proponent.

## Financial Implications:

Revised pricing will be presented to Council once the results of the RFP have been received.

## Policies/Legislation:

Municipal Act, 2001



#### Staff Report

Report To:	Council Meeting
From:	Magda Badura, CAO/Treasurer
Date:	2022-06-23
Subject:	Rodney Wastewater Treatment Plant Refurbishment Project

#### **Recommendation:**

That West Elgin Council hereby receives the report from M. Badura, CAO/Treasurer re: Rodney Wastewater Treatment Plant Refurbishment Project;

And that, West Elgin council directs staff to transfer \$800,000 previously budgeted to lagoon dredging towards mechanical upgrades as part of the Rodney Wastewater Treatment Plant Refurbishment Project;

And That cost of lagoon dredging at the Rodney Wastewater Treatment Plant be covered by 2022 OCIF funding.

#### Background:

In 2019, through the Investing in Canada Infrastructure Program (ICIP), the Government of Canada designed to create long-term economic growth, build inclusive, sustainable and resilient communities and support a low-carbon economy.

Through ICIP, the federal government is providing \$11.8 billion in federal infrastructure funding to cost-share projects under the following four streams:

- Public Transit
- Green Infrastructure
- Community, Culture and Recreation
- Rural and Northern Communities

The Green stream includes up to \$7.12 billion in combined federal (\$2.85 billion), provincial (\$2.35 billion) and other partner (\$1.92 billion) funding over 10 years for projects across three federal substreams that advance outcomes associated with climate change mitigation, environmental quality and disaster mitigation.

The target funding was allocated to the Municipalities with a population of 100,000 or less. Indigenous communities in Ontario with a population of 100,000 or less; and Local Services Boards, Conservation Authorities and not-for-profit organizations that own water, wastewater and stormwater infrastructure and serve populations under 100,000.

In January-2020 grant application was submitted outlining number of deficiencies within the plant along with the list of objectives. The following items were included in the application process.

- 1. The replacement of the secondary clarifier.
- 2. Restoration of the storage lagoon by clean-out of wasted sludge storage.

3. Replace deteriorated equipment that is no longer functional and proven ineffective and inefficient.

The refurbishment of the Rodney Wastewater Treatment Plant was approved in the 2021 Capital Budget. The cost of the project was estimated to be \$2,355,000.00.

Unfortunately, Rodney Wastewater Treatment plant refurbishment project cannot be delayed any longer and the mechanical replacement must pass through certain execution sequence in order to maintain the operation of the plant with the minimum disturbance.

The following options are being considered:

- 1. Rodney WPCP does not have a redundant secondary clarifier tank, so the replacement of existing secondary clarifier mechanism requires a complete decommission of the clarification system and bypassing the influent to the lagoon.
- 2. The secondary clarifier replacement process might roughly take up to two months before the completion of the replacement and commissioning of the new mechanism.
- 3. The lagoon has the capacity to receive all plant influent during the replacement process and thus can be prepared ahead of time by starting to decant the lagoon and send the decant to the front end of the plant for treatment.
- 4. The existing screening system will be removed once the new screening system arrives on site and is ready for installation. The new screening system can be installed after the removal of the existing screen or during the replacement of the secondary clarifier mechanism while the influent is diverted to the lagoon. The existing screen is currently non-operational, and its removal will not affect the current plant operation. An arrangement is needed to divert the influent directly to the aeration tanks to allow for the installation of the new screen without disturbance, also it is recommended to arrange for the readiness of the power supply and electrical connection of the new screen before its installation.
- 5. The processes of removal of existing surface aerators and installation of the new aeration system will be conducted in one aeration tank while directing the flow to the other tank and redirect the flow to the first tank upon completion of installation and commissioning of the first tank. The aeration tanks would also require cleaning from all rags and sludge that have accumulated over the years at the bottom of the tanks.
- 6. Three air blowers will be supplied and installed in the exiting empty garage in the main building.

It is recommended to order the required secondary clarifier mechanism, air blowers, aeration piping, fine bubble diffusers, and the screen in the early stage of the project. Also, it is recommended to uninstall the existing FRP enclosures of the secondary clarifier and the screen unit before the receipt of the ordered equipment.

Cost estimates are based on the preliminary design and 2022 dollars. Construction cost is estimated to be \$1,914,800, for the lowest to \$3,350,900 for the highest.

Due to volatile market it is estimated that the mechanical replacement will not be completed with the budget outlined in the grant application and is recommended that \$800,000 previously allocated to lagoon dredging be transferred to cover the possible shortfall of mechanical replacement. replacement.

Future plans:

Request for Tender has been deferred to September 2022 in hopes to obtain better prices. Currently we are in a middle of a volatile market. Construction, products and materials are in high demand, which drive up costs, as well as other seasonal considerations which impact the project costs. In addition, custom materials, products or equipment become a challenge to procure in a busy marketplace. Limited funds and careful planning is required to eliminated a rush delivery on some materials that can come at a premium price.

## Financial Implications:

Total eligible funding available through the ICIP Grant for the Municipality of West Elgin is \$2,355,000, of which the Federal Government provides 40% (\$942,000), Provincial Government provides 33.3% (\$784,921.50), and the Municipality is responsible for 26.7% of total eligible cost plus any project costs over-and-above this.

Rodney Sewage reserve balance as of Dec 31 2021 is \$256,969.66

OCIF Funding reserve balance as of Dec 31 2021 is \$831,592.75

It is recommended that OCIF Funding be used to cover the shortfall.

## **Report Approval Details**

Document Title:	Rodney Sewage Refurbishment Project - 2022-22-Administration Finance.docx
Attachments:	<ul> <li>Basis of Design Report.pdf</li> <li>20220525 - 215817 - West Elgin-Rodney WWTP</li> <li>Upgrades.pdf</li> </ul>
Final Approval Date:	Jun 20, 2022

This report and all of its attachments were approved and signed as outlined below:

Jana Nethercott



## **Rodney WPCP Upgrades**

**Basis of Design Report** 

May 5, 2022

Prepared for:







## Rodney Water Pollution Control Plant Upgrades

Basis of Design Report

Municipality of West Elgin

This document is protected by copyright and was prepared by R.V. Anderson Associates Limited for the account of the Municipality of West Elgin. It shall not be copied without permission. The material in it reflects our best judgment in light of the information available to R.V. Anderson Associates Limited at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. R.V. Anderson Associates Limited accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.



RVA 215817 May 5, 2022
### Rodney WPCP Upgrades Basis of Design Report

## TABLE OF CONTENTS

1.0	PROJ	ECT BACKGROUND	. 2
2.0	OBJE	CTIVES	. 3
3.0	ASSE	SSMENT OF THE EXISTING SYSTEM PERFORMANCE	. 4
4.0	RODN	IEY WASTEWATER TREATMENT REVIEW	. 6
	4.1 4.2 4.3	Historic Influent Flowrates and Characteristics Effluent Compliance Limits and Objectives	.6 .7 8
5.0		ENT AND FUTURE OPERATION DESKTOP ANAYSIS AND BIOWIN	. 9
5.0 6.0	CURR MODE	ENT AND FUTURE OPERATION DESKTOP ANAYSIS AND BIOWIN LING	. 9 11
5.0 6.0	CURR MODE UPGR	ENT AND FUTURE OPERATION DESKTOP ANAYSIS AND BIOWIN LING ADE DESIGN CRITERIA. Aeration System Upgrade	. 9 11 11
5.0 6.0	CURR MODE UPGR 6.1 6.2	ENT AND FUTURE OPERATION DESKTOP ANAYSIS AND BIOWIN LING ADE DESIGN CRITERIA. Aeration System Upgrade Screen Upgrade	. 9 11 11 12
5.0 6.0	CURR MODE UPGR 6.1 6.2 6.3 6.4	ENT AND FUTURE OPERATION DESKTOP ANAYSIS AND BIOWIN ELING ADE DESIGN CRITERIA. Aeration System Upgrade Screen Upgrade Secondary Clarifier Mechanism Replacement Alum Storage Tank Replacement	. <b>9</b> <b>11</b> 12 13 13
5.0 6.0 7.0	CURR MODE UPGR 6.1 6.2 6.3 6.4 PROJ	ENT AND FUTURE OPERATION DESKTOP ANAYSIS AND BIOWIN ELING ADE DESIGN CRITERIA. Aeration System Upgrade Screen Upgrade Secondary Clarifier Mechanism Replacement Alum Storage Tank Replacement.	. 9 11 12 13 13 13

### Table of Tables

Table 4.1 – Rodney WPCP Historic Influent Flowrates	6
Table 4.2 – Rodney WPCP Historic Influent Characteristics	6
Table 4.3 – Plant Current and Plant rated Capacity Flowrates	7
Table 4.4 – Rodney WPCP CofA Effluent Compliance Limits and Objectives	7
Table 4.5 – Rodney WPCP Historic Effluent Data	8
Table 8.1 - Range for Cost Opinions	.16
Table 8.2 – Rodney WPCP Upgrades Cost Estimation Error! Bookmark not defin	ed.

## List of Figures

Figure 6.1 – Air Blowers and Main /	Air Discharge Pipeline Layout	12
-------------------------------------	-------------------------------	----

## 1.0 PROJECT BACKGROUND

The Rodney Water Pollution Control Plant (WPCP) is located at 22590 Pioneer Line. It is an activated sludge facility consisting of an off-site sewage pumping station, mechanical bar screen, extended aeration, secondary clarifier, tertiary filtration, and ultra-violet (UV) disinfection. A sludge lagoon is adjacent to the plant and is used for sludge storage. The treated effluent is discharged directly to Sixteen Mile Creek. The facility has a rated capacity of 590 m<sup>3</sup>/day.

The sewage pumping station is located at 155 Furnival Road and contains two (duty / standby) submersible pumps rated at 27 L/s. The pumps are controlled with an ultrasonic level controller and backed-up with floats. The flow is conveyed to the WPCP or to the sludge lagoons via a 200mm forcemain. A stand-by power diesel generator provides back-up power in emergency situations.

The plant receives flow from the aforementioned pumping station through the screen inlet channel and a mechanical bar rake screen designed for a peak flow rate of 2,190 m<sup>3</sup>/d screens the flow. Flow is then split into two (2) aeration tanks with mechanical surface aerators. Each extended aeration tank contains three (3) mechanical surface aerators rated at 7.6 kW each.

The mixed activated liquor then flows to a single center-feed, column supported secondary clarifier. Solids are settled and collected via the sludge collector mechanism and are returned to the aeration tanks via two (2) return sludge pumps. Scum is collected with a skimmer arm connected to the sludge collector mechanism and is pumped to the lagoon.

The secondary clarifier effluent flows to four (4) continuous backwash sand filters with a total surface area of  $9.3 \text{ m}^2$ . The filters are serviced with two compressors rated at 18.9 L/s at 860 kPa and two (2) filter backwash pumps rated at 1.5 L/s. The filter effluent is directed to the UV disinfection system located in the same building as the final filters.

## 2.0 OBJECTIVES

The Municipality of West Elgin (Municipality) retained RV Anderson Associates Limited (RVA) to:

- Review plant data and conduct BioWin modelling for the treatment train for sizing of the appropriate technology.
- Review headworks technology options based on cost, compatibility with current operation/constraints, and ease of operation and maintenance.
- Review fine bubble diffused aeration system technology options based on cost, compatibility with current operation/constraints, and ease of operation and maintenance.
- Review clarifier mechanism technology options based on cost, compatibility with current operation/constraints, and ease of operation and maintenance.
- Review the background information and the capacities of wastewater processes. The design parameters for the headworks and aeration upgrades will then be developed based on desktop and BioWin modeling as required.

RVA reviewed both "Visual Condition Assessment Report" completed by RVA in 2017, and "20 Year Capital Plan for Rodney WWTP" reported by OCWA 2019; RVA also visited the plant to investigate historic operational issues through discussions with operating staff. RVA concluded that some of the plant's equipment, infrastructures, and units require an immediate upgrade and refurbishment to improve the plant operation and the safety of the operators, as well as reduce the plant maintenance requirement and power consumption.

The existing headworks facility including the mechanical screen, channel, and enclosure have been evaluated. The mechanical bar screen is showing signs of deterioration and rust, and the screenings removal is done manually with a rake and bucket which is no longer industry standard and exposes operators to undue risk. The screen enclosure shows significant signs of deterioration, and no heating is provided within the enclosure. RVA proposed to replace the existing screen with a new Shaftless Spiral Conveyor screen including Screen Discharge, Spiral brush, Screen frame-to-channel wall side seals, Washing spray jets, one control panel (outdoor installation), and one Custom FRP Enclosure. With the new screening system, there will be no involvement of the operators in picking up the screenings manually and will prevent passing large particles to downstream aeration tanks.

The existing mechanical surface aerators show some signs of deterioration and rust. Operators noted aerators experience frequent breakdowns and require routine repair. A new fine bubble diffused aeration system is proposed to replace the existing surface aerators. Two duty and one dedicated for each tank of a common standby air blower are proposed for this application along with fine bubble diffusers and air supply piping. The new aeration system will include DO sensors and VFDs to control the air blowers' operation and optimized the power consumption of the plant base on dissolved oxygen concentration in the aeration tanks.

During the latest site visit, the existing enclosure of the secondary clarifier did not help with a clear assessment of the existing secondary clarifier mechanism system. However, previous reports indicated that it is not functioning properly, and the scum collection chamber is always clogged. A new clarification mechanism is proposed to replace the existing one. The existing FRP enclosure on top of the clarifier tank will be removed to allow for removal of the existing mechanism and the installation of the new mechanism. The existing FRP enclosure has no useful function and further it makes it difficult for the operators to access the clarifier for maintenance and it lacks lighting and ventilation.

184

The existing Phosphorus removal chemical storage tank freezes in winter and indoor totes are used in the winter to avoid freezing. The outdoor chemical tank containment area is filled with rainwater with no drain provided and the sump pump is not functioning to empty the containment. A new polyethylene chemical storage tank with proper heat tracing is proposed to replace the existing chemical tank.

## 4.0 RODNEY WASTEWATER TREATMENT REVIEW

### 4.1 Historic Influent Flowrates and Characteristics

Rodney WPCP historical influent data 2017-2020 was analyzed to determine the average influent flow and characteristics. Table 4.1 and 4.2 summarize the historic influent flows and characteristics. The average day flow, (ADF) equates to 359 m<sup>3</sup>/d and the max day flow (MDF) equates to 1,792 m<sup>3</sup>/d.

The ECA indicates that the existing lifting pumping station has two submersible pumps (1 duty / 1 standby) each with capacity of 27 L/s, hence it is assumed that the current Peak Instantaneous Flow (PIF) is equal to 27 L/s (i.e. 2,333 m<sup>3</sup>/d), and it is also assumed in worst case the current Peak Hourly Flow (PHF) is equal to PIF equates to 2,333 m<sup>3</sup>/d.

The plant rated capacity is 590 m<sup>3</sup>/d and its (PIF) will equal to the lifting pump capacity of 27 l/s (i.e. 2,333 m<sup>3</sup>/d) and it is also assumed that the PDF and PHF of the plant rated capacity equal to PIF equates to 2,333 m<sup>3</sup>/d. Table 4.3 illustrates the current and plant rated capacity flowrates

Year	Unit	Influent Average Day Flow, ADF	Influent Max Day Flow, MDF
2017	m³/d	348	588
2018	m³/d	396	1,560
2019	m³/d	363	1,972
2020	m³/d	327	727
Average / Max	m³/d	359	1,972

### Table 4.1 – Rodney WPCP Historic Influent Flowrates

### Table 4.2 – Rodney WPCP Historic Influent Characteristics

Year	Unit	BOD5	TSS	TKN	ТР
2017	mg/L	109	116	29.5	3.5
2018	mg/L	101	128	26.9	3.0
2019	mg/L	110	110	27.0	2.6
2020	mg/L	117	123	32.9	3.3
Average	mg/L	109	119	29.1	3.1
Average Max Month	mg/L	235	263	43	4.7

Year	Unit	Average Day Flow, ADF	Max Day Flow, MDF	Peak Hourly Flow, PHF	Peak Instantaneous Flow, PIF
Plant Current Flowrate	m³/d	360 <sup>(1)</sup>	1,972 <sup>(1)</sup>	2,333 <sup>(3)</sup>	2,333 <sup>(3)</sup>
Plant Rated Capacity	m³/d	590 <sup>(2)</sup>	2,333 <sup>(3)</sup>	2,333 <sup>(3)</sup>	2,333 <sup>(3)</sup>
(1) Historic I	Data				

### Table 4.3 – Plant Current and Plant rated Capacity Flowrates

(2) ECA

(3) Assumed

## 4.2 Effluent Compliance Limits and Objectives

Rodney WPCP operates under CofA 3-0871-88-949 which specifies the effluent compliance limits and the design objectives for the existing works. Table 4.4 details the CofA effluent compliance limits and objectives of Rodney WPCP.

	Compliance Lim	its	Objectives		
Effluent Parameters	Monthly Average Concentration (mg/L)	Average Loading (kg/d)	Monthly Average Concentration (mg/L)	Average Loading (kg/d)	
CBOD₅				-	
Non-Freezing Period	10.0	6.9	5.0	3.9	
Freezing Period	15.0		10.0		
total Suspended Solids TSS					
Non-Freezing Period	10.0	6.9	5.0	3.9	
Freezing Period	15.0		10.0		
Total Phosphorus					
Non-Freezing Period	0.5	04	0.3	0.28	
Freezing Period	1.0	0.4	0.8	0.20	
Total Ammonia Nitrogen					
Non-Freezing Period	3.0		2.0	1 5 7	
Freezing Period	5.0	2.2	4.0	1.57	
Total Chlorine Residual	0.01				
Dissolved Oxygen	> 4	N/A	> 5	N/A	
E. Coli	<200 organisms/100 mL	N/A	<150 organisms/100 mL	N/A	

Table 4.4 – Rodney WPCP CofA Effluent Compliance Limits and Objectives

## 4.3 Effluent Characteristics

Rodney WPCP historical effluent data of 2017-2020 were analyzed to determine the average effluent characteristics. Tables 4.5 summarizes the effluent characterises

Year	Climate	BOD₅	Total Suspended Solids, TSS	Total Ammonia- Nitrogen, TAN	Total Phosphorus, TP
		(mg/L)	(mg/L)	(mg/L)	(mg/L)
Average	Non-Freezing	2.0	2.1	0.11	0.09
2017	Freezing	3.1	3.4	0.11	0.11
Average	Non-Freezing	2.3	3.5	0.10	0.10
2018	Freezing	3.5	6.2	0.17	0.16
Average	Non-Freezing	2.1	3.8	0.11	0.10
2019	Freezing	4.2	7.3	0.10	0.20
Average	Non-Freezing	2.4	4.0	0.12	0.10
2020	Freezing	5.3	7.4	0.55	0.17
Total	Non-Freezing	2.2	3.4	0.11	0.10
Average	Freezing	4.0	6.1	0.23	0.16

Table 4.5 –	Rodnev	WPCP	Historic	Effluent	Data
	i to anoy		111010110		Dutu

## 5.0 CURRENT AND FUTURE OPERATION DESKTOP ANAYSIS AND BIOWIN MODELING

Rodney WPCP current and plant rated capacities were analyzed and modeled via BioWin software to determine the required aeration for both biological oxidation and tank's mixing, also to check whether the existing clarifier size is enough for the plant rated capacity and the max month loadings.

The historic average day flow of 360 m<sup>3</sup>/day and historic average influent characteristics and average max month characteristics summarized in table 5.2, were used to calibrate the BioWin models of the plant current operation for both average influent temperature of 12 °C and max influent temperature of 21 °C.

The objective of the model was to establish the historic average and max-month conditions to identify the required aeration for the biological oxidation for both average influent temperature of 12 °C and the max influent temperature of 21 °C.

Plant historic data was used to prepare a calibrated BioWin model for the plant rated capacity (590 m<sup>3</sup>/day) operation. See Appendix 1 – for current and plant rated capacity BioWin Modeling and desktop analysis.

The plant has two aeration tanks, each aeration tank has volume of 410 m<sup>3</sup> which is enough to handle the current flowrate of 360 m<sup>3</sup>/day and provides 27 h of HRT (MECP guideline: extended aeration HRT equals or larger than 15 h). One aeration tank is also enough to handle the plant rated capacity of 590 m<sup>3</sup>/day and provides 17 h of HRT. It is recommended that the municipality operate one aeration tank at a time to lower energy consumption.

The BioWin models show that at the current plant operation with average influent characteristics, the required aeration for the tank mixing (300 m<sup>3</sup>/hr) is greater than the required aeration for the biological oxidation, while the required aeration for biological oxidation at the max month loading and at the summer season with influent temperature of 21 °C is 332 m<sup>3</sup>/hr. Therefore, three air blowers were selected to operate the plant, two duty and one standby. One duty air blower will be dedicated for each aeration tank with capacity of 332 m<sup>3</sup>/hr which is enough to supply the required aeration for the maximum biological oxidation for max month loading and aeration tank mixing.

The Surface Overflow Rates (SOR)s at the peak hourly flow (PHF) of the secondary clarifier were calculated and found equates to 32 m<sup>3</sup>/m<sup>2</sup>-d which is less than 37 m<sup>3</sup>/m<sup>2</sup>-d (MECP guidelines) for both current and plant rated capacity (refer to Appendix A for details).

The Solids Loading Rates (SLR)s of the secondary clarifier at the peak day flow (PDF) were also calculated and found to be less than 170 m<sup>3</sup>/m<sup>2</sup>-d (MECP guidelines) for average and max loading for both current and plant rated capacity. This would indicate that the existing secondary clarifier has enough capacity to handle the current and the plant rated capacity flowrates at both average and max-month influent loadings.

## 6.0 UPGRADE DESIGN CRITERIA

### 6.1 Aeration System Upgrade

The existing surface aerators will be replaced with a new aeration system which consists of air blowers, air discharge main header, air distribution piping, and fine-bubble diffusers.

Three air blowers are proposed, 2 duty/1 standby. All blowers will be installed in the garage of the main building and the discharge air pipeline will run out of the garage and to the aeration tanks. Power to the blowers will be from the existing MCC in the MCC room. The discharge of each blower will have a butterfly valve for isolation and all blowers will be interconnected to two discharge headers. The two discharge headers (one dedicated for each tank) will be buried form the garage to the tanks. The headers will be interconnected to provide redundancy, should one of the lines fail. Figure 7.1 illustrates the proposed layout of the air blowers and the main air discharge pipeline.



Figure 6.1 – Air Blowers and Main Air Discharge Pipeline Layout.

### 6.2 Screen Upgrade

The existing screen unit which consists of stationary screen with rotation scraper arm will be decommissioned, removed, and replaced with spiral conveyor screen to be fit within the existing channel. The existing FRP housing will also be removed and replaced with a new FRP housing which will include lighting, ventilation, heater, gas monitoring system, access and roll up doors.

The new screen will be sized for PIF of 27 L/s (2,333m<sup>3</sup>/d).

The new screen unit will be supplied with outdoor Control Panel, ultrasonic level sensor, float switch, and local E-stop station, and a Davit Crane System.

### 6.3 Secondary Clarifier Mechanism Replacement

The existing secondary clarifier mechanism will be decommissioned, removed, and replaced with a new mechanism.

The new clarification mechanism will have the dimeter of 9.75 m and will be placed in the existing clarifier tank. It will include a centre inlet column with 0.6 m diameter, influent stilling well with a minimum diameter of 1.94 m, peripheral effluent weir with approximate length of 29 m, sludge collector mechanism including a centre support column, collector arms, gear assembly drive unit and four siphon tubes, two per rake arm to remove settled sludge rapidly at a controlled rate, scum removal mechanism, scum chamber and one scum pump. This replacement process entails the removal of the existing FRP housing on top of the secondary clarifier to allow access to the existing clarifier mechanism.

## 6.4 Alum Storage Tank Replacement

The existing Alum Storage Tank of 30,000 L capacity will be replaced with another PE Chemical Storage Tank of 10,000 L capacity which will be enough to store the required Alum solution enough for 3 - 6 months of the plant operation. The new tank will be heat traced to avoid crystallization of the solution in winter

### 7.0 PROJECT STAGING

Rodney WPCP upgrading process has to pass through certain execution sequence in order to maintain the operation of the current plant with the minimum disturbance.

Rodney WPCP does not have a redundant secondary clarifier tank, so the replacement of existing secondary clarifier mechanism requires a complete decommission of the clarification system and bypassing the influent to the lagoon. The secondary clarifier replacement process might roughly take up to two months before the completion of the replacement and commissioning of the new mechanism. The lagoon has the capacity to receive all plant influent during the replacement process and thus can be prepared a head of time by start decanting the lagoon and send the decant to the front end of the plant for treatment. Knowing that the existing decant pump is repeatedly clogged, a new wet well chopper type decant pump should be supplied to start decanting process ahead of time of clarifier mechanism replacement process.

The existing screening system will be removed once the new screening system arrives on site and is ready for installation. The new screening system can be installed after the removal of the existing screen or during the replacement of the secondary clarifier mechanism while the influent is diverted to the lagoon. The existing screen is currently non-operational, and its removal will not affect the current plant operation. An arrangement is needed to divert the influent directly to the aeration tanks to allow for the installation of the new screen without disturbance, also it is recommended to arrange for the readiness of the power supply and electrical connection of the new screen before its installation.

The processes of removal of existing surface aerators and installation of the new aeration system will be conducted in one aeration tank while directing the flow to the other tank and redirect the flow to the first tank upon completion of installation and commissioning of the first tank. The aeration tanks would also require cleaning from all rags and sludge that have accumulated over the years at the bottom of the tanks.

Three air blowers will be supplied and installed in the exiting empty garage in the main building.

It is recommended to order the required secondary clarifier mechanism, air blowers, aeration piping, fine bubble diffusers, and the screen in the early stage of the project. Also, it is recommended to uninstall the existing FRP enclosures of the secondary clarifier and the screen unit before the receipt of the ordered equipment. Upon arrival of the ordered air blowers and aeration piping at the site, the installation of the air blowers and aeration piping up to the aeration tanks should be started before decommissioning of the existing secondary clarifier mechanism.

However, in order to reduce the time of influent diverting to the lagoon, the replacement of the secondary clarifier should be completed in shortest time as possible, and in the same period the two aeration tanks should be cleaned and have the aeration piping inside the tanks along with the fine bubble diffusers installed at least in one aeration tank. Upon completion of the equipment installation and re-commissioning of the plant the second aeration tank can be cleaned and has the installation of the aeration piping and fine bubble diffusers.

The new screen can be installed in the same influent diverting period or prior to that as well.

### 8.0 COST ESTIMATE

ASTM E2516 – 11 (2019) Standard Classification for Cost Opinion Classification System provides a five- level classification system based on the level of project definition (i.e., percentage of design completion). There are five levels of cost level classification ranging from Class 5 which is an order of magnitude cost opinion to Class 1 which is based upon the actual bid costs for a project. Table 8.1 shows the assumed level of accuracy for each of these levels.

Class	Purpose of % of Project		Cost Opinion Range	
	Costing Exercise	Definition	Low	High
Class 5	Screening or Feasibility	0% to 2%	-30%	50%
Class 4	Concept Study or Feasibility	1% to 15%	-20%	40%
Class 3	Preliminary Design	10% to 40%	-20%	30%
Class 2	Detailed Design	30% to 70%	-10%	20%
Class 1	Final Design/Tender	70% to 100%	-5%	10%

### Table 8.1 – Range for Cost Opinions

The cost estimation provided in this report is Class 3.

The total cost estimate was prepared based on the following assumptions:

- 2022 dollars based on the date this report is written;
- Building estimates are approximated based on size and type of construction using per meter squared costs;
- No costs are provided for land acquisition if this is required;
- Equipment estimates are based on vender quotations obtained during the design stage and/or historical data. Allowance percentages were added for installation based on equipment cost;
- Costs for process piping, electrical, and HVAC completed based on the preliminary design layouts and may vary during the detailed design stage;
- Contractor mark-up of 15% was added based on projects recently completed by RVA;
- Construction Contingency Allowance is 10% of the estimated total construction cost;
- Estimating contingency allowance within the range of low and high, (i.e. -20% and + 30% of the sub-total); and
- Concrete unit prices used based on current market conditions and may vary with the price of metal.

The following items are excluded from the cost estimate:

- Applicable Taxes and HST;
- Applicable Approvals including building permits and Environmental Certificate of Approval;
- Removal of hazardous waste including asbestos, paint containing lead, and any unidentified buried structures; and

• Additional costs for construction approaches including accelerated construction, multiple construction contracts, equipment pre-selection, and contractor pre-selection.

Table 8.2 gives a summary of capital cost breakdown for upgrading the existing Rodney WPCP as stated earlier in this report.

ITEM	COST
Division 1 – General	28,000
Division 2 – Site Works	158,000
Division 3 – Concrete	20,000
Division 5 – Metals	63,000
Division 9 – Finishes	8,000
Division 11 – Process Equipment	972,000
Division 13 – Control and Instrumentation	180,000
Division 15 – Mechanical	250,000
Division 16 – Electrical	195,000
SUB-TOTAL -1	1,874,000
Bonds and Insurance	50,000
Mobilization & Demobilization	20,000
Contractor Mark-Up (15%)	291,600
Construction Contingency	150,000
SUB-TOTAL -2	2,393,500
Estimating Contingency Class 4 (Low -20%)	1,914,800
Estimating Contingency Class 4 (High +40%)	3,350,900
Engineering cost (13% of Sub-Total -2)	311,155
TOTAL PROJECT COST (LOW)	1,914,800
TOTAL PROJECT COST (HIGH)	3,350,900

Table 8.2 – Rodney WPCP	<b>Upgrades Cost Estimation</b>
-------------------------	---------------------------------

APPENDIX A Rodney WPCP Upgrades Cost Estimate



## Rodney WPCP Upgrades

	May 4, 2022			
	Cost Estimate			
ITEM <u>No.</u>	DESCRIPTION	UNIT	E	STIMATED AMOUNT
SUMMARY PA	ART 1.0 - GENERAL ITEMS			
1.1	Insurance & Bonding	L.S.	\$	50,000.00
1.2	Mobilization & De-Mobilization	L.S.	\$	20,000.00
1.3	Fencing, Signage, and Traffic Control	L.S.	\$	8,000.00
1.4	Temporary Facilities	L.S.	\$	20,000.00
	Total for Part 1.0	- General Requirements	\$	98,000.00
SUMMARY PA	ART 2.0 – SITE WORKS			
2.1 Removal	& Demolition			
a)	Screen Room equipment, Bar Screens, Conveyor, and associated Equipment	L.S.	\$	8,000.00
b)	Seconary Clarifier Mechanism	L.S.	\$	12,000.00
c)	10000L Alum Tank	L.S.	\$	10,000.00
d)	Mechanical Surface Aerators	L.S.	\$	8,000.00
2.2 Site Prep	aration			
a)	Clearing & Grubbing	L.S.	\$	5,000.00
b)	Stripping & Stockpiling Topsoil	L.S.	\$	5,000.00
2.3 Excavation	& Backfilling			
c)	Yard Piping - Pipes	L.S.	\$	65,000.00
b)	Yard Piping - Electrical Vaults	L.S.	\$	15,000.00
c)	Restoration	L.S.	\$	30,000.00
	Total	for Part 2.0 - Site Works	\$	158,000.00
SUMMARY PA	ART 3.0 – CONCRETE			
3.1	Alum Tank Enclosure	L.S.	\$	20,000.00
	Tot	al for Part 3.0 - Concrete	\$	20,000.00
SUMMARY PA	ART 4.0 – MASONRY			
	Το	tal for Part 4.0 - Masonrv	\$	-
SUMMARY PA	ART 5.0 – METALS	<i>,</i>		
5.1	Structural Steel (Lintels, scum troughs, etc)	L.S.	\$	35,000,00
5.2	Grating	L.S.	\$	20.000.00
5.3	Guardrails, Ladders, Aluminum Stairs	L.S.	\$	8.000.00
	· · · · · · · · · · · · · · · · · · ·	otal for Part 5.0 - Metals	\$	63.000.00
SUMMARY PA	ART 9.0 – FINISHES		<u>т</u>	
92	Blower Room	LS	\$	8 000 00
<u> </u>	Το	tal for Part 9.0 - Finishes	\$	8.000.00



SUMMARY PA	RT 11.0 – PROCESS EQUIPMENT			
11.1	Spiral Screens, Conveyor, and Control Panel	L.S.	\$	250,000.00
11.5	Decant Wet Well Pump (1)	L.S.	\$	50,000.00
11.6	Centrigual Blowers (3)	L.S.	\$	90,000.00
11.7	Aeration Diffusers (2 tanks)	L.S.	\$	27,000.00
11.8	Circular Clarifier Mechanism	L.S.	\$	440,000.00
11.14	Alum Tank	L.S.	\$	15,000.00
11.20	Installation and Labour	L.S.	\$	100,000.00
	Total for Part 11	.0 - Process Equipment	\$	972,000.00
SUMMARY PA	RT 13.0 – CONTROL AND INSTRUMENTATION			
13.1	Integration Allowance	L.S.	\$	35,000.00
13.7	Pressure Transmitters	L.S.	\$	75,000.00
13.9	Gas Monitoring System	L.S.	\$	35,000.00
13.12	DO & Sensor Transmitters	L.S.	\$	35,000.00
	Total for Part 13.0 - Cont	rol and Instrumentation	\$	180,000.00
SUMMARY PA	RT 15.0 – MECHANICAL			
15.2	Chemical Building Ventilation	L.S.	\$	50,000.00
15.3	Mechanical Piping	L.S.	\$	100,000.00
15.4	Process Valves	L.S.	\$	50,000.00
15.7	Piping Hangers and Supports	L.S.	\$	25,000.00
15.8	Pipe Insulation	L.S.	\$	25,000.00
Total for Part 15.0 - Mechanical				
SUMMARY PA	RT 16.0 – ELECTRICAL			
16.1	Duct Banks and Electrical Manholes	L.S.	\$	75,000.00
16.2	Conduits and Feeder Cables	L.S.	\$	60,000.00
16.3	Control & Instrumentation Wires	L.S.	\$	60,000.00
	Total	for Part 16.0 - Electrical	\$	195,000.00
	Total	<b>Construction Costs</b>		\$1,944,000
	Capital Cost Estimate Summary			
А	Construction Cost	L.S.	\$	1,944,000
B	Construction Contingency	L.C.	\$	150 000
	Concil action Containing Chief	Sub-Total	\$	2.094.000
				,,
		Sub-Total	\$	2,094,000
	Estima	ting Contingency (20%)	\$	388,800
	Total Capit	tal Costs (Roun <u>ded)</u>	_	\$2,500,000

APPENDIX B-1 Secondary Clarifier Mechanism



# **Rodney WWTP**

Ontario

### Representative

Tonia Van Dyk C & M Environmental Technologies Mississauga, Ontario (705) 725-9377 tvandyk@cmeti.com

#### Contact

Matt Williams mwilliams@westech-inc.com

Matt Pearson mpearson@westech-inc.com



Proposal Number: 2160552 Wednesday, April 27, 2022 202



# **Table of Contents**

#### **Technical Proposal**

Item A – Clarifier Mechanism Model CLC18G

#### **Clarifications and Exceptions**

#### **Commercial Proposal**

Bidder's Contact Information Pricing Payment Terms Schedule Freight

#### Warranty

**Terms & Conditions** 



# **Technical Proposal**

## Item A – Clarifier Mechanism Model CLC18G

General Scope of Supply				
Item	Unit	Value/Description		
Number of Mechanisms	Each	1		
Application	-	Activated Sludge Secondary		
Tank Diameter	m	9.75 (32')		
Tank Side Wall Depth	m	4.27 (14') **		
Tank Side Water Depth	m	3.66 (12')		
Tank Bottom Slope	-	0.25:12**		
Design Flow Rate	ML/D	1.32 (0.35 MGD) **		
Peak Flow Rate	ML/D	2.88 (0.76 MGD) **		
Influent MLSS Concentration	mg/L	3000**		
SVI	mL/g	130**		
**Assumed Values				

Detailed Scope of Supply - Each Mechanism Includes the Following					
ltem	Qty	Size/Description	Material		
Walkway Bridge	1	914 mm (36") wd. Beam Bridge	304 SS		
Walkway Handrail	-	2 Rail Component Handrail, Pop Rivet	Aluminum		
Walkway Flooring	-	32 mm (1.25") Grating	Aluminum		
Drive Platform	1	610 mm (24") Minimum Drive Clearance	304 SS		
Platform Handrail	-	2 Rail Component Handrail, Pop Rivet	Aluminum		
Platform Flooring	-	6.4 mm (0.25") Checker Plate	Aluminum		
Center Column	1	610 mm (24") dia. x 6.4 mm (0.25") thick	304 SS		
Center Cage	1	0.914 m (3') Square	304 SS		
Dual Gate EDI	1	1.83 m (6') dia. x 0.762 m (2.5') dp. x 4.8 mm 0.1875" pl.	304 SS		
Feedwell	1	3.05 m (10') dia. x 1.52 m (5') dp. x 4.8 mm (0.1875") pl.	304 SS		
Suction Header	1	Rectangular Tapered Cross-Section	304 SS		
Suction Header Support Arms	2	Box Truss Header Supports, 0.914 m (3') wide	304 SS		
Opposite Arm	1	0.914 (3') wide	304 SS		
Rotating Suction Manifold	1	2.13 m (7') dia. x 6.4 mm (0.25") thick	304 SS		
Skimmer Blade & Supports	2	Extends from feedwell to hinged skimmer	304 SS		
Hinged Skimmer Assembly	2	With neoprene wipers	HDG/304 SS/Alum		
Scum Box & Supports	1	0.914 m (3') Scum Box	304 SS		
Scum Flushing Valve	1	Skimmer Actuated	Polymer/SS		
Effluent Weir	1	229 mm (9") dp. x 6.4 mm (0.25") thick	FRP		
Scum Baffle & Supports	1	305 mm (12") dp. x 6.4 mm (0.25") thick	FRP		
Electrical Control Panel	1	NEMA 4X	304 SS		
Drive Unit	1	See Drive Unit Table for description			
Anchor Bolts & Fasteners	-	-	304 SS		



Drive Unit				
Description	Unit	Value/Description		
Drive Type	C31	Cage Drive w/ Precision Bearing		
Housing Material	-	Fabricated Steel		
Continuous Rated Torque	ft·lbs	6,000		
Momentary Peak Torque	ft·lbs	12,000		
Rake Tip Speed	ft/min	10		
Motor Size	HP	1		
Motor Voltage/Frequency/Phase	V / Hz / Phase	460 / 60 / 3		
Torque Control Settings	Alarm: ft·lbs Motor Cutout: ft·lbs	100%: 6,000 120%: 7,200		
Main Gear and Pinion Lubrication	-	Oil		
Main Bearing and Reducer Lubrication	-	Grease		

Surface Preparation and C	Coating
---------------------------	---------

Application	Surface	Finish
Surfaces	Preparation	
Stainless Steel	Cleaning Grade "C"	See Below for Details
Drive Unit	SSPC-SP6	One (1) coat Tnemec N140F-1255 Epoxy, 4-6 mils DFT, and one (1) coat Tnemec 1074U-B5712 Polyurethane, 3-5 mils DFT

#### **Stainless Steel Finish**

CLEANING GRADE "C"

- PRE-CLEAN ALL SURFACES IN ACCORDANCE WITH THE WESTECH WORKMANSHIP STANDARD (QR-00-063) SECTIONS 12 & 13, TO ENSURE THAT ALL SHARP EDGES, BURRS, WELD SPATTER, WELD SLAG ARE REMOVED.
- 2. A MINIMUMAL AMOUNT OF FREE IRON MAY REMAIN ON SURFACES. THESE LOCATIONS SHALL BE LIMITED TO SMALL PIN-POINT AREAS 1/16" (1mm) IN DIAMETER OR LESS, SCATTERED IN A RANDOM PATTERN, AND SHALL BE LESS THAN 1% OF THE TOTAL SURFACE AREA.
- 3. ALL SURFACES SHALL BE FREE FROM:
  - a. HEAT TINT (REGARDLESS OF HEAT SOURCE; WELDING, THERMAL CUTTING, OR GRINDING).
  - b. OXIDES AND TARNISH (FROM THERMAL CUTTING, AND TIGHTLY ADHERENT BROWN OR BLACK TARNISH FORMED ALONG THE TOE OF A WELD).
- 4. THIS REQUIRED CLEANING APPLIES TO INTERNAL AND EXTERNAL SURFACES SUBJECT TO CORROSIVE MEDIA ATTACK; SUCH AS INTERNAL SURFACES OF PIPING.



CLEANING GRADE "C"



### **Approximate Weights**

Item	Weight	Unit
Center Column	1400	lbs
Cage, Suction Header, Header Support Arm, Opposite Rake Arm, Sludge Manifold	3450	lbs
EDI, Feedwell, Feedwell Supports	2750	lbs
Standard Skimmer, Standard Scum Box	1000	lbs
Bridge & Platform	1000	lbs
Drive Unit	2200	lbs
Heaviest Single Item (Drive Unit)	2200	lbs

#### **Additional Services and Equipment**

WesTech has included on-site technical assistance for inspection, observation of torque testing, startup, and instruction of plant personnel. Additional on-site services may be purchased at standard WesTech daily rates plus travel and living expenses.

On-Site Technical Service			
Item	Quantity		
Total Number of Trips	1		
Total Number of Days	1		

### Items Not Included in WesTech's Base Scope of Supply (unless specifically noted)

- Concrete/Grout
- Concrete and Anchor Reinforcement
- Conduits and Wiring
- Erection or Assembly
- Lubricants
- Piping, Valves, or Fittings
- Unloading or Storage

## **Optional Items**

Equipment Options				
No.	ltem	Description	Material	
A-1	316 SS Adder	Use 316 SS fabrication in lieu of 304 SS	316 SS	



# **Clarifications and Exceptions**

## **General Clarifications**

**Terms & Conditions:** This proposal, including all terms and conditions contained herein, shall become part of any resulting contract or purchase order. Changes to any terms and conditions, including but not limited to submittal and shipment days, payment terms, and escalation clause shall be negotiated at order placement, otherwise the proposal terms and conditions contained herein shall apply.

**Paint:** If your equipment has paint included in the price, please take note to the following. Primer paints are designed to provide only a minimal protection from the time of application (usually for a period not to exceed 30 days). Therefore, it is imperative that the finish coat be applied within 30 days of shipment on all shop primed surfaces. Without the protection of the final coatings, primer degradation may occur after this period, which in turn may require renewed surface preparation and coating. If it is impractical or impossible to coat primed surfaces within the suggested time frame, WesTech strongly recommends the supply of bare metal, with surface preparation and coating performed in the field. All field surface preparation, field paint, touch-up, and repair to shop painted surfaces are not by WesTech.

**Escalation:** If between the proposal date and actual procurement and through no fault of the Seller, the relevant cost of labor, material, freight, tariffs, and other Seller costs combined relating to the contract, increase by greater than 2.5% of the overall contract price, then the contract price shall be subject to escalation and increased. Such increase shall be verified by documentation and the amount of contract price escalation shall be calculated as either the actual increased cost to the Seller or, if agreed by the Parties, the equivalent increase of a relevant industry recognized third-party index, and in both cases without any additional profit or margin being added.

**USA Tariffs and Current Trade Laws:** All prices are based on current USA and North America tariffs and trade laws/agreements at time of bid. Any changes in costs due to USA Tariffs and trade laws/ agreements will be passed through to the purchaser at cost.



## **Commercial Proposal**

Proposal Name: Rodney WWTP Proposal Number: 2160552 Wednesday, April 27, 2022

1. Bidder's Contact Information				
Company Name	WesTech Engineering, LLC			
Primary Contact Name	Matt Williams			
Phone	801.265.1000			
Email	mwilliams@westech-inc.com			
Address: Number/Street	3665 S West Temple			
Address: City, State, Zip	Salt Lake City, UT 84115			
2. Budget Pricing Currency: CAN Dollars				
Scope of Supply				
A (1) 32' Diameter Clarifier N	Aechanism Model CLC18G	\$383,000		
A-1 316 SS Adder		\$73,000		
Taxes (sales, use, VAT, IVA, IGV, duties, import fees, etc.) Not Include				
Prices are valid for a period not to exceed 30 days from date of proposal.				
Additional Field Service				

 Daily Rate (Applicable Only to Field Service Not Included in Scope)
 \$1,600

 Pricing does not include field service unless noted in scope of supply, but is available at the daily rate plus expenses. The greater of a two week notice or visa procurement time is required prior to departure date. Our field service policy can be provided upon request for more details.

3. Payment Terms	
Purchase Order Acceptance and Contract Execution	10%
Submittals Provided by WesTech	15%
Release for Fabrication	35%
Notification of Ready to Ship	40%

All payments are net 30 days. Partial shipments are allowed. An approved Letter of Credit is required if Incoterms CIF, CFR, DAP, CIP, or CPT are applicable. Payment is required in full for all other Incoterms prior to international shipment. Other terms per WesTech proforma invoice. Please note that the advising bank must be named as: Wells Fargo Bank, International Department, 9000 Flair Drive, 3rd Floor, El Monte, California 91731, USA.

4. Schedule		
Submittals, after Purchase Order Acceptance and Contract Execution	6 to 8 weeks	
Ready to Ship, after Receipt of Final Submittal Approval	18 to 20 weeks	
Estimated Weeks to Ready to Ship	24 to 28 weeks*	
*Customer submittal approval is typically required to proceed with equipment fabrication and is not accounted for in the schedule above. Project schedule will be extended to account for time associated with receipt of customer submittal approval.		
n national		

J. HEIGHL			
Domestic	FOB Shipping Point - Full Freight Allowed to Jobsite (FSP-FFA)		
From	Final Destination	Number of Trucks or Containers	
WesTech Shops	Ontario	TBD	



## **One-Year Warranty**

WesTech is meeting a global need for clean water through technology treatment solutions. We are proud that the equipment and systems we design, build, maintain, and operate are making the world a better place and creating a more sustainable environment for future generations.

Equipment manufactured or sold by WesTech Engineering, LLC, once paid for in full, is backed by the following warranty:

Subject to the terms below, WesTech warrants all new equipment manufactured or sold by WesTech Engineering, LLC to be unencumbered and free from defects in material and workmanship, and WesTech will replace or repair, F.O.B. its factories or other location it chooses, any part or parts returned to WesTech which WesTech's examination and analysis determine have failed within the warranty period because of defects in material and workmanship. The warranty period is either, one calendar year immediately following start-up, or eighteen (18) months from when WesTech sent its ready-to-ship notification to the purchaser, whichever expires sooner. All repair or replacement parts qualifying under this warranty shall be free of charge. Purchaser will provide timely written notice to WesTech of any defects it believes should be repaired or replaced under this warranty. WesTech will reject as untimely any warranty defect claim that purchaser submits more than thirty (30) days after the possible warranty defect first occurred. Unless specifically stated otherwise, this warranty does not cover normal wear or consumables. This warranty is not transferable.

This warranty shall be void and shall not apply where the equipment or any part thereof

- a) has been dismantled, modified, repaired or connected to other equipment, outside of a WesTech factory, or without WesTech's written approval, or
- b) has not been installed in complete adherence to all WesTech's or parts manufacturer's requirements, recommendations, and procedures, or
- c) has been subject to misuse, abuse, neglect, or accident, or has not at all times been operated and maintained in strict compliance with all of WesTech's requirements and recommendations therefor, including, but not limited to, the relevant WesTech Operations & Maintenance Manual and any other of WesTech's specified guidelines & procedures, or
- has been subject to force majeure events; use of chemicals not approved in writing by WesTech; electrical surges; overloading; significant power, water or feed supply fluctuations; or noncompliance with agreed feedwater or chemical volumes, specifications or procedures.

In any case where a part or component of equipment under this warranty is or may be faulty and the component or part is also covered under the warranty of a third party then the purchaser shall provide reasonable assistance to first pursue a claim under the third party warranty before making a claim under this warranty from WesTech. WesTech Engineering, LLC gives no warranty with respect to parts, accessories, or components purchased other than through WesTech. The warranties which apply to such items are those offered by the respective manufacturers.



This warranty is expressly given by WesTech and accepted by purchaser in lieu of all other warranties whether written, oral, express, implied, statutory or otherwise, including without limitation, warranties of merchantability and fitness for particular purpose. WesTech neither accepts nor authorizes any other person to assume for it any other liability with respect to its equipment. WesTech shall not be liable for normal wear and tear, corrosion, or any contingent, incidental, or consequential damage or expense due to partial or complete inoperability of its equipment for any reason whatsoever. The purchaser's exclusive and only remedy for breach of this warranty shall be the repair and or replacement of the defective part or parts within a reasonable time of WesTech's accepting the validity of a warranty claim made by the purchaser.



## **Terms & Conditions**

Terms and Conditions appearing in any order based on this proposal which are inconsistent herewith shall not be binding on WesTech Engineering, LLC The sale and purchase of equipment described herein shall be governed exclusively by the foregoing proposal and the following provisions:

**1. SPECIFICATIONS:** WesTech Engineering, LLC is furnishing its standard equipment as outlined in the proposal and as will be covered by final approved drawings. The equipment may not be in strict compliance with the Engineer's/Owner's plans, specifications, or addenda as there may be deviations. The equipment will, however, meet the general intention of the mechanical specifications of these documents.

2. ITEMS INCLUDED: This proposal includes only the equipment specified herein and does not include erection, installation, accessories, nor associated materials such as controls, piping, etc., unless specifically listed.

**3. PARTIES TO CONTRACT:** WesTech Engineering, LLC is not a party to or bound by the terms of any contract between WesTech Engineering, LLC's customer and any other party. WesTech Engineering, LLC's undertakings are limited to those defined in the contract between WesTech Engineering, LLC and its direct customers.

4. PRICE AND DELIVERY: All selling prices quoted are subject to change without notice after 30 days from the date of this proposal unless specified otherwise. Unless otherwise stated, all prices are F.O.B. WesTech Engineering, LLC or its supplier's shipping points. All claims for damage, delay or shortage arising from such equipment shall be made by Purchaser directly against the carrier. When shipments are quoted F.O.B. job site or other designation, Purchaser shall inspect the equipment shipped, notifying WesTech Engineering, LLC of any damage or shortage within forty-eight hours of receipt, and failure to so notify WesTech Engineering, LLC shall constitute acceptance by Purchaser, relieving WesTech Engineering, LLC of any liability for shipping damages or shortages.

**5.** PAYMENTS: All invoices are net 30 days. Delinquencies are subject to a 1.5 percent service charge per month or the maximum permitted by law, whichever is less on all past due accounts. Pro rata payments are due as shipments are made. If shipments are delayed by the Purchaser, invoices shall be sent on the date when WesTech Engineering, LLC is prepared to make shipment and payment shall become due under standard invoicing terms. If the work to be performed hereunder is delayed by the Purchaser, payments shall be based on the purchase price and percentage of completion. Products held for the Purchaser shall be at the risk and expense of the Purchaser. Unless specifically stated otherwise, prices quoted are for equipment only. These terms are independent of and not contingent upon the time and manner in which the Purchaser receives payment from the owner.

**6. PAYMENT TERMS:** Credit is subject to acceptance by WesTech Engineering, LLC's Credit Department. If the financial condition of the Purchaser at any time is such as to give WesTech Engineering, LLC, in its judgment, doubt concerning the Purchaser's ability to pay, WesTech Engineering, LLC may require full or partial payment in advance or may suspend any further deliveries or continuance of the work to be performed by the WesTech Engineering, LLC until such payment has been received.

7. ESCALATION: If between the proposal date and actual procurement and through no fault of the Seller, the relevant cost of labor, material, freight, tariffs, and other Seller costs combined relating to the contract, increase by greater than 2.5% of the overall contract price, then the contract price shall be subject to escalation and increased. Such increase shall be verified by documentation and the amount of contract price escalation shall be calculated as either the actual increased cost to the Seller or, if agreed by the Parties, the equivalent increase of a relevant industry recognized third-

party index, and in both cases without any additional profit or margin being added.

**8. APPROVAL:** If approval of equipment submittals by Purchaser or others is required, a condition precedent to WesTech Engineering, LLC supplying any equipment shall be such complete approval.

**9. INSTALLATION SUPERVISION:** Prices quoted for equipment do not include installation supervision. WesTech Engineering, LLC recommends and will, upon request, make available, at WesTech Engineering, LLC's then current rate, an experienced installation supervisor to act as the Purchaser's employee and agent to supervise installation of the equipment. Purchaser shall at its sole expense furnish all necessary labor equipment, and materials needed for installation.

Responsibility for proper operation of equipment, if not installed by WesTech Engineering, LLC or installed in accordance with WesTech Engineering, LLC's instructions, and inspected and accepted in writing by WesTech Engineering, LLC, rests entirely with Purchaser; and any work performed by WesTech Engineering, LLC personnel in making adjustment or changes must be paid for at WesTech Engineering, LLC's then current per diem rates plus living and traveling expenses.

WesTech Engineering, LLC will supply the safety devices described in this proposal or shown in WesTech Engineering, LLC's drawings furnished as part of this order but excepting these, WesTech Engineering, LLC shall not be required to supply or install any safety devices whether required by law or otherwise. The Purchaser hereby agrees to indemnify and hold harmless WesTech Engineering, LLC from any claims or losses arising due to alleged or actual insufficiency or inadequacy of the safety devices offered or supplied hereunder, whether specified by WesTech Engineering, LLC or Purchaser, and from any damage resulting from the use of the equipment supplied hereunder.

**10. ACCEPTANCE OF PRODUCTS:** Products will be deemed accepted without any claim by Purchaser unless written notice of non-acceptance is received by WesTech Engineering, LLC within 30 days of delivery if shipped F.O.B. point of shipment, or 48 hours of delivery if shipped F.O.B. point of destination. Such written notice shall not be considered received by WesTech Engineering, LLC unless it is accompanied by all freight bills for said shipment, with Purchaser's notations as to damages, shortages and conditions of equipment, containers, and seals. Non-accepted products are subject to the return policy stated below.

**11. TAXES:** Any federal, state, or local sales, use or other taxes applicable to this transaction, unless specifically included in the price, shall be for Purchaser's account.

**12. TITLE:** The equipment specified herein, and any replacements or substitutes therefore shall, regardless of the manner in which affixed to or used in connection with realty, remain the sole and personal property of WesTech Engineering, LLC until the full purchase price has been paid. Purchaser agrees to do all things necessary to protect and maintain WesTech Engineering, LLC's title and interest in and to such equipment; and upon Purchaser's default, WesTech Engineering, LLC may retain as liquidated damages any and all partial payments made and shall be free to enter the premises where such equipment is located and remove the same as its property without prejudice to any further claims on account of damages or loss which WesTech Engineering, LLC may suffer from any cause.

**13. INSURANCE:** From date of shipment until the invoice is paid in full, Purchaser agrees to provide and maintain at its expense, but for WesTech Engineering, LLC's benefit, adequate insurance including, but not limited



to, builders risk insurance on the equipment against any loss of any nature whatsoever.

**14. SHIPMENTS:** Any shipment of delivery dates recited represent WesTech Engineering, LLC's best estimate but no liability, direct or indirect, is assumed by WesTech Engineering, LLC for failure to ship or deliver on such dates.

WesTech Engineering, LLC shall have the right to make partial shipments; and invoices covering the same shall be due and payable by Purchaser in accordance with the payment terms thereof. If Purchaser defaults in any payment when due hereunder, WesTech Engineering, LLC may, without incurring any liability therefore to Purchaser or Purchaser's customers, declare all payments immediately due and payable with maximum legal interest thereon from due date of said payment, and at its option, stop all further work and shipments until all past due payments have been made, and/or require that any further deliveries be paid for prior to shipment.

If Purchaser requests postponements of shipments, the purchase price shall be due and payable upon notice from WesTech Engineering, LLC that the equipment is ready for shipment; and thereafter any storage or other charge WesTech Engineering, LLC incurs on account of the equipment shall be for the Purchaser's account.

If delivery is specified at a point other than WesTech Engineering, LLC or its supplier's shipping points, and delivery is postponed or prevented by strike, accident, embargo, or other cause beyond WesTech Engineering, LLC's reasonable control and occurring at a location other than WesTech Engineering, LLC or its supplier's shipping points, WesTech Engineering, LLC assumes no liability in delivery delay. If Purchaser refuses such delivery, WesTech Engineering, LLC may store the equipment at Purchaser's expense. For all purposes of this agreement such tender of delivery or storage shall constitute delivery.

**15. WARRANTY:** WesTech Engineering LLC warrants equipment it supplies only in accordance with the attached WesTech Warranty. This warranty is expressly given by WesTech and accepted by purchaser in lieu of all other warranties whether written, oral, express, implied, statutory or otherwise, including without limitation, warranties of merchantability and fitness for particular purpose. WesTech neither accepts nor authorizes any other person to assume for it any other liability with respect to its equipment. WesTech shall not be liable for normal wear and tear, corrosion, or any contingent, incidental, or consequential damage or expense due to partial or complete inoperability of its equipment for any reason whatsoever. The purchaser's exclusive and only remedy for breach of this warranty shall be the repair and or replacement of the defective part or parts within a reasonable time of WesTech's accepting the validity of a warranty claim made by the purchaser.

16. PATENTS: WesTech Engineering, LLC agrees that it will, at its own expense, defend all suits or proceedings instituted against Purchaser and pay any award of damages assessed against it in such suits or proceedings, so far as the same are based on any claim that the said equipment or any part thereof constitutes an infringement of any apparatus patent of the United States issued at the date of this Agreement, provided WesTech Engineering, LLC is given prompt notice in writing of the institution or threatened institution of any suit or proceeding and is given full control of the defense, settlement, or compromise of any such action; and Purchaser agrees to give WesTech Engineering, LLC needed information, assistance, and authority to enable WesTech Engineering, LLC so to do. In the event said equipment is held or conceded to infringe such a patent, WesTech Engineering, LLC shall have the right at its sole option and expense to a) modify the equipment to be non-infringing, b) obtain for Purchaser the license to continue using said equipment, or c) accept return of the equipment and refund to the Purchaser the purchase price thereof less a reasonable charge for the use thereof. WesTech Engineering, LLC will reimburse Purchaser for actual out-of-pocket expenses, exclusive of legal fees, incurred in preparing such information and rendering such assistance at WesTech Engineering, LLC's request. The foregoing states the entire liability of WesTech Engineering, LLC, with respect to patent infringement; and except as otherwise agreed to in writing, WesTech Engineering, LLC assumes no responsibility for process patent infringement.

**17. SURFACE PREPARATION AND PAINTING:** If furnished, shop primer paint is intended to serve only as minimal protective finish. WesTech Engineering, LLC will not be responsible for the condition of primed or finish painted surfaces after equipment leaves its shops. Purchasers are invited to inspect paint in shops for proper preparation and application prior to shipment. WesTech Engineering, LLC assumes no responsibility for field surface preparation or touch-up of shipping damage to paint. Painting of fasteners and other touch-up to painted surfaces will be by Purchaser's painting contractor after mechanism installation.

Motors, gear motors, and other components not manufactured by WesTech Engineering, LLC will be painted with that manufacturer's standard paint system. It is WesTech Engineering, LLC's intention to ship major steel components as soon as fabricated, often before drive, motors, and other manufactured components. Unless Purchaser can ensure that shop primed steel shall be field painted within thirty (30) days after arrival at the job site, WesTech Engineering, LLC encourages the Purchaser to order these components without primer.

WesTech Engineering, LLC's prices are based on paints and surface preparations as outlined in the main body of this proposal. In the event that an alternate paint system is selected, WesTech Engineering, LLC requests that Purchaser's order advise of the paint selection. WesTech Engineering, LLC will then either adjust the price as may be necessary to comply or ship the material unpainted if compliance is not possible due to application problems or environmental controls.

**18. CANCELLATION, SUSPENSION, OR DELAY:** After acceptance by WesTech Engineering, LLC, this proposal, or Purchaser's order based on this proposal, shall be a firm agreement and is not subject to cancellation, suspension, or delay except upon payment by Purchaser of appropriate charges which shall include all costs incurred by WesTech Engineering, LLC to date of cancellation, suspension, or delay plus a reasonable profit. Additionally, all charges related to storage and/or resumption of work, at WesTech Engineering, LLC's plant or elsewhere, shall be for Purchaser's sole account; and all risks incidental to storage shall be assumed by Purchaser.

**19. FORCE MAJEURE:** Neither party hereto shall be liable to the other for default or delay in delivery caused by extreme weather or other act of God, strike or other labor shortage or disturbance, fire, accident, war or civil disturbance, act of government, pandemic, delay of carriers, failure of normal sources of supply, complete or partial shutdown of plant by reason of inability to attain sufficient raw materials or power, and/or other similar contingency beyond the reasonable control of the respective parties. The time for delivery specified herein shall be extended during the continuance of such conditions, or any other cause beyond such party's reasonable control. Escalation resulting from a Force Majeure event shall be equitably adjusted per the escalation policy stated above.

**20. RETURN OF PRODUCTS:** No products may be returned to WesTech Engineering, LLC without WesTech Engineering, LLC's prior written permission. Said permission may be withheld by WesTech Engineering, LLC at its sole discretion.

**21. BACKCHARGES:** WesTech Engineering LLC will not approve or accept backcharges for labor, materials, or other costs incurred by Purchaser or others in modification, adjustment, service, or repair of WesTech Engineering LLC furnished materials unless such back charge has been authorized in advance in writing by a WesTech Engineering LLC purchase order, or work requisition signed by WesTech Engineering LLC.



**22. INDEMNIFICATION:** Purchaser agrees to indemnify WesTech Engineering, LLC from all costs incurred, including but not limited to court costs and reasonable attorney fees, from enforcing any provisions of this contract, including but not limited to breach of contract or costs incurred in collecting monies owed on this contract.

**23. ENTIRE AGREEMENT:** This proposal expresses the entire agreement between the parties hereto superseding any prior understandings and is not subject to modification except by a writing signed by an authorized officer of each party.

**24. MOTORS AND MOTOR DRIVES:** In order to avoid shipment delays of WesTech Engineering, LLC equipment, the motor drives may be sent directly to the job site for installation by the equipment installer. Minor fit-up may be required.

**25. EXTENDED STORAGE:** Extended storage instructions will be part of information provided to shipment. If equipment installation and start-up is delayed more than 30 days, the provisions of the storage instructions must be followed to keep WARRANTY in force.

**26. LIABILITY:** Professional liability insurance, including but not limited to, errors and omissions insurance, is not included. In any event, liability for errors and omissions shall be limited to the lesser of \$100,000 USD or the value of the particular piece of equipment (not the value of the entire order) supplied by WesTech Engineering LLC against which a claim is sought.

27. ARBITRATION NEGOTIATION: Any controversy or claim arising out of or relating to the performance of any contract resulting from this proposal or

contract issued, or the breach thereof, shall be settled by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association, and judgment upon the award rendered by the arbitrator(s) may be entered to any court having jurisdiction.

ACCEPTED BY PURCHASER

Customer Name: \_\_\_\_\_

Customer Address:

Contact Name:\_\_\_\_

Contact Phone: \_\_\_\_

Contact Email: \_\_\_\_\_

Signature: \_\_\_\_

Printed Name:

Title:\_\_\_\_\_

Date:





TEM	
1	31" DRIVE UNIT WITH TORQUE CONTROL DEVICE, 6000 FT-LBS CONTINUOUS RUNNING TORQUE.
2	3'-0 WIDE WALKWAY WITH 1 1/4" GRATING.
3	8'-6 LONG x 6'-6 WIDE PLATFORM (WITH MINIMUM 2'-0 CLEARANCE AROUND DRIVE) WITH 1/4" FLOORPLATE.
4	HANDRAIL 1 1/2" NOMINAL DIAMETER x 3'-6 HIGH, 2-RAIL WITH 4 INCH EXTRUDED KICKPLATE.
5	1'-6 OUTSIDE DIAMETER CENTER INFLUENT COLUMN WITH INFLUENT PORTS.
6	10'-0 INSIDE DIAMETER x 5'-0 SIDEDEPTH FEEDWELL WITH BAFFLED SCUM PORTS.
7	FEEDWELL SUPPORTS.
8	3'-0 SQUARE DRIVE CAGE.
9	(1) 3'-0 WIDE x 3'-0 HIGH SUPPORT ARM.
10	WEIR PLATE (OPTIONAL).
11	BAFFLE PLATE (OPTIONAL).
12	(1) SKIMMER BLADE WITH SUPPORT.
13	(1) SCUM SKIMMER ASSEMBLY WITH WIPERS.
14	3'-0 SCUM BOX WITH SUPPORTS AND DISCHARGE PIPE CONNECTION WITH FLEXIBLE COUPLING.
15	SCUM FLUSHING VALVE.
16	6'-0 INSIDE SQUARE x 2'-6 SIDEDEPTH ENERGY DISSIPATING INLET WELL WITH MULTIPLE INLET GATES.
17	5'-0 DIAMETER SLUDGE MANIFOLD.
18	(1) SUCTION HEADER WITH ORIFICES SUPPORTED BY A PLANE TRUSS.
19	DENSITY CURRENT BAFFLE (OPTIONAL).
20	ELECTRICAL CONTROL PANEL (OPTIONAL).
D FOR:	

ENGINEER:

CONTRACTOR:



WING	ING IS PROPERTY OF WESTECH ENGINEERING INC. AND IS TRANSMITTED IN CONFIDENCE NETHER RECEIPT NOR POSSESSION CONFERS OR TRANSFERS ANY RIGHTS TO E, USE, OR DISCLOSE, IN WHOLE OR IN PART, DATA CONTAINED HEREIN FOR ANY RUPPOSE WITHOUT THE WRITTEN FERMISSION OF WESTECH ENGINEERING INC.				
:	GENERAL	ARRANGEMENT -	TANK CUTAWAY	VIEW	
	Ø30'-40' C	LARIFIER			
	CLC18G				
	DESIGNER	CHECKER	APPROVER	DATE	
	RI62	LY13		2021-05-17	
		DOCUMENT NUMBER		SHEET	REV
		PROP123-1001		1 OF 1	-



ARED FOR:				
IEER:				
RACTOR:				
CONTRACT				
ER				
	We	sTech	4	
NG IS PROPERTY OF WESTECH ENGINEE , USE, OR DISCLOSE, IN WHOLE OR IN P	RING INC. AND IS TRANSMITTED IN ART, DATA CONTAINED HEREIN FOR ANY	CONFIDENCE NEITHER RECEIPT NOR POSSESSION OF PURPOSE WITHOUT THE WRITTEN PERMISSION	NFERS OR TRANSFERS ANY RIGHTS TO I OF WESTECH ENGINEERING INC.	
NG IS PROPERTY OF WESTECHBRIGHER LISE: OR DISCLOSE NUMHOLE OR NO GENERAL A	RING NC AND IS TRANSMITTED N NART, DATA CONTAINED HEREIN FOR ANY	CONFIDENCE NETHER RECEIPT NOR POSSESSION OC PURPOSE WITHOUT THE WRITTEN PERMISSION	NFERS OR TRANSFERS ANY RIGHTS TO OF WESTECH ENGINEERING INC.	
ING IS PROPERTY OF WESTECHINGNEE E LISE: OR DECLOSE NUMCLE OR NO GENERAL A Ø 30'-40' CL	RING INC. AND IS TRANSMITTED IN ART, DATA CONTAINED HEREIN FOR ANY ARTANGEMENT · ARIFIER		NFERS OR TRANSFERS ANY ROHTS TO LOF WESTECH ENGINEERING INC.	
NO IS PROPERTY OF WESTED-IBNORME LIDE OR DECLOSE N WHOLE OR NA GENERAL A Ø 30'-40' CL/ CLC18G	RING INC. AND IS TRANSMITTED IN NART, DATA CONTAINED HEREINFOR ANY INCRANGEMENT · ARIFIER	COMPERATE NETHER RECEIPT NOR POSSESSION OF RANGOUS WITHOUT THE WITTIN I PERMASKO	NEERS OR TRANSFERS ANY RIGHTS TO OF WESTECHENGINEERING NC.	
NOS ROMENTO OF MESTED-IDAGHE LUER ORIDECIDER INVIDUE OF MA Ø 30'-40' CLJ CLC18G DESIGNER	RING AC, AND IS TRANSMITTED IN ART, DATA CONTINUED HERRING ANY ARRANGEMENT - ARIFIER CHECKER	COMPORT NETHER RECEIPTING PROSESSOON RUPCORE WITHOUT THE WRITTEN REMAINS - ELEVATION VIEW APPROVER	INTERG CRITINASTERE ANY ROHTS TO OF WESTECH ENGINEERING INC.	
IN S ROMENT OF WESTED-INGENE GENERAL A Ø 30'-40' CLJ CLC18G DESIGNER RI62	ANG INC AND STRANSMITTED IN INC. AND STRANSMIT	APPROVER	DATE           10-20-20.21	
NE & ROCHTY OF WESTED-BROKE LIER ORDBROGE NYMOLIORNA GENERAL A Ø 30'-40' CLJ CLC18G DESIGNER RI62	RRANK-AND TRANSMITTEN N RRANGEMENT AND ARIFIER CHECKER LY13 DOCUMENT NUMBER	APPROVER	DATE DATE 10-20-2021 DATE 10-20-2021 SHEET	REV



KWAY		
$\bigcirc$		
PARED FOR:		
INEER:		
/CONTRACT		
IBER		
Weste	ЕСН	
UNING IS RECIPENTY OF VIESTICH BACARDERING NC: AND IS TRANSMITTED N UNIX USE, ON DISCLORE, N WHOLE OR NIVIAT, DATA COMTANDO FERNIFICIA ANY RAPODE VITHOL UNIX USE, ON DISCLORE, N WHOLE OR NIVIAT, DATA COMTANDO FERNIFICIA ANY	CEPT NOR POSSESSION CONFERS OR TRANSFERS ANY R T THE WRITTEN PERMISSION OF WESTECH ENGINEERING IN	IGHTS TO
E: GENERAL ARRANGEMENT - PLAN VI	EW	
CLC18G		
DESIGNER CHECKER APP	ROVER	DATE
DOCUMENT NUMBER	SHEET	REV
PROP123-1003	1 OF	1 -
## **COP<sup>™</sup> Suction Header Clarifier**

**Rapid Solids Removal** 







## **Clarifier Optimization Package**



The COP™ Suction Header merges the rapid solids removal of a suction header mechanism with the performance-enhancing components of the WesTech Clarifier Optimization Package (COP). The combination of these features provides high-quality effluent and full-floor sludge removal with every rotation.

### Why Choose a COP<sup>™</sup> Clarifier?

When denitrification or secondary phosphorous release may occur in your secondary clarifier, you need a system that will get the solids to the floor more quickly and remove them more efficiently. Combining COP features like the Dual-Gate<sup>™</sup> energy-dissipating inlet (EDI) and flocculating feedwell in conjunction with a suction header mechanism helps remove the solids from the system efficiently. This prevents process upsets and/or effluent violations.

The influent center column is sized and ported to both prevent settling and to systematically reduce incoming velocities. Our unique Dual-Gate EDI nearly eliminates hydraulic energy as the flow enters the feedwell. The flocculating feedwell (FFW) encourages the interaction of the solids as they exit the EDI. This leads to larger floc particles that improve settleability without inducing increased vertical velocities which could scour the sludge blanket. The suction header removes the settled solids from the tank floor with every rotation.

### **Rapid Solids Removal Mechanism**

- Removes solids quickly from clarifier tanks
- Limits denitrification in the secondary clarifier
- Helps prevent secondary phosphorous release in biological phosphorous removal plants





### **Premium Drive Unit**

Designed for torque requirements from 1,000 ft-lbs to 6,000,000 ft-lbs, the Premium Drive Unit provides rotational force to the clarifier mechanism while resisting torque loads and overturning moments.

### **Density Current Baffle**

Eliminates wall currents and prevents short-circuiting. The wall-mounted baffle is low in cost and requires no maintenance.

### Scum Remova

Removes scum build-up from within the feedwell and from the clarifier surface.

### **Flocculating Feedwell**

Promotes hydraulic flocculation in the inlet area and is designed to eliminate scouring of the sludge blanket.

### **Center Column**

Minimizes floc shearing and reduces influent energy.

### **Sludge Manifold**

Transmits hydraulic suction from return activated sludge (RAS) pumps to suction header collector(s).

### **Suction Header**

Rapid, hydraulically driven sludge removal via engineered orifices in either one or two tapered header duct(s).

### **Energy-Dissipating Inlet (EDI)**

Reduces the higher energy feed from the center column into a lower velocity flow. The flow is then gently introduced as a tangential flow into the flocculating feedwell to maximize flocculation.



Represented by:



info@westech-inc.com Salt Lake City, Utah, USA

© WesTech Engineering, LLC 2021









## Drive Units



Municipal and industrial customers have been coming to WesTech since the 1970s for precision bearing drives, as part of the company's high-quality process equipment offerings for liquid-solids separation. Our drive gives you a flexible design, precision components, and strict quality control. WesTech guarantees a long drive life and the best fit for your process equipment needs. We stand behind our equipment, which has proven to meet the toughest requirements.



Clarifier and thickener drive units provide the rotational force necessary to turn the rake arms in a circular basin. The rotating rake arms transport settled solids to the center of the tank for removal. Because drive units are applied in water and wastewater treatment plants, as well as industrial facilities, WesTech has developed a premium drive unit for each application. WesTech drive units can be designed for torque requirements from 1,000 ft-lbs to 6,000,000 ft-lbs.

### **Industrial & Minerals**

- Contact Clarifiers for Raw Water
- Concentrate and Tailings Thickeners
- Paste Thickeners
- CCD Circuits
- DAF Units for Oily Wastes
- Circular Oil / Water Separators
- General Duty Clarifiers and Thickeners

### Wastewater

- Primary Clarifiers
- Secondary Clarifiers
- Tertiary Contact Clarifiers
- Gravity Sludge Thickeners
- DAF Thickeners

### Water

- Sedimentation Clarifiers
- Contact Clarifiers
- Flocculating Clarifiers
- Gravity Sludge Thickeners
- Filter Backwash Clarifiers

## Precision Bearing Drive

WesTech offers precision bearings in its drive units, a better choice when compared to the primitive strip-liner bearings of other units.



### **Precision Manufacturing Tolerances**

The precision bearings WesTech uses in its drive units are ideal for high load, high speed applications and are manufactured by recognized bearing companies. The use of these precision bearings is widespread among larger and more heavily-loaded clarifier and thickener mechanisms common to the metallurgical industries, in addition to overhead cranes, gun turrets, and track hoes.

### **Exceptional Long Life and Load Capacities**

Instead of applying the bearing load in four points on the bearing balls as with the old-style strip-lined bearings, the precision bearing utilizes a full band contact race with hardness equal to that of the strip liners. Calculated bearing life is at least five times that for strip liners of the same ball size and diameter. The need for splitting gears and housings is eliminated because of the superior service life.

### **Overturning Load Capacity**

Strip-lined bearings have no inherent overturning load capacity and must rely on the mechanism weight alone to hold the bearing race together. This capacity of the precision bearing makes possible tank settling, misalignment, and lack of precision leveling of the drive during installation and operation a far less determining factor in premature bearing failure.

### **Even Load Distribution**

As the figure shows, the rotating turntable of the strip-liner can easily separate from its stationary base and cause a point load on one or two bearing balls. This separation can occur with the simple action of a skimmer riding over a scum box. The locked ring design of the precision bearing eliminates damaging point loads by equally transferring any unbalanced load to the entire group of bearing balls.

### **Main Bearing Protection**

WesTech gear housings protect the bearings from dirt and contamination using designed neoprene seals and gaskets, whereas striplined bearings typically only use a loose felt seal. WesTech precision gears also allow the bearing to run in a separate, sealed grease cavity, which achieves additional protection from contamination.

## Advantages of the WesTech Drive



### **Cycloidal Speed Reducer**

can withstand momentary shock loads exceeding 500% of its rated continuous torque. At least two-thirds of the speed reducer teeth are engaged at any one time. The rolling action of the main lobes and pins reduces heat buildup and wear, while increasing efficiency to 95% per stage.

**OTOTOTOTOT** 

### Heavy-duty Gear and Bearing Housings

are available in mild steel, stainless steel, or cast iron. The steel and stainless steel designs use box construction to provide the strongest drive base on the market. Now you can select your preferred material of construction and combine it with the best drive mechanism design available.

### **Precision Main Gear and Bearing**

in a WesTech drive has a calculated L-10 service life exceeding 100 years. The alloy steel gear teeth are hardened to 285-321 BHN for exceptional gear life. A modified-addendum main gear tooth geometry increases load distribution among gear teeth, reduces gear wear, and prevents tooth breakage. The tight bearing tolerances maintain a proper gear-to-pinion alignment.

### **Direct Coupling**

of motors, speed reducers, and shafts eliminates drive chains, belts, and an oily mess around the drive. This design improves safety, reduces maintenance requirements, and provides a neat and clean space-saving design.

### **Torkmatic<sup>™</sup> Overload Protection**

accurately senses the torque from the pinion shaft and displays it on the torque indicator. On every new drive, the electromechanical switches are factory set for high-torque alarm and high-torque motor cutout to protect the mechanism from damage. These settings can also be confirmed by field tests during start-up. Other options include rake arm lift, remote monitoring, redundant motor cutout, and explosion-proof torque boxes. An electronic load cell type torque protection is also available for use on new and existing drives.

### **Pinion Bearings**

eliminate overhung loads on the output bearing of the speed reducer. The upper and lower pinion bearings keep the pinion shaft in precise alignment with the main gear.

### **Lubrication Options**

While oil lubrication has been the standard for many years, WesTech also supplies an all-grease lubricated drive. Grease lubrication eliminates the need for periodic condensate draining and messy oil changes, as well as the threat of potential oil spills. Both systems of lubrication have been successfully used for years and help ensure a long bearing life.

## Design Flexibility

One of the unique advantages of premium WesTech drives is their great flexibility in design. This flexibility allows the engineer to select a drive that best matches the environmental and mechanical requirements. WesTech's thorough design and meticulous component selection yields a strong, reliable, premium-quality drive that will provide a long service life with minimum maintenance. Your drive unit will be delivered to the job site completely assembled, shop tested, and ready to be installed.

### **Drive Unit Types**

WesTech offers two main drive types: the Shaft Drive and the Cage Drive. The selection of the drive type depends on how the rotating mechanism will be supported in a given application.

### **Cage Drive**

A cage drive unit rests on a stationary column mounted in the center of the tank. A half or full-span bridge then attaches to the robust housing of the drive unit. This column-mounted drive transmits power to the sludge collection system through a center cage mechanism.

### Shaft Drive

A shaft drive works well in smaller-diameter tanks where the entire mechanism is supported by a full-span bridge. This bridge-mounted drive transmits power to the sludge collection system through a center drive shaft.

### Drive Unit Options

**Concentric Dual Drive** 

Dual drives are multi-tasking units that provide independent mixing in the feedwell, while the rakes transport settled solids along the floor. Supplied in both shaft and cage designs, dual drives are commonly used in WesTech's Solids CONTACT CLARIFIERS<sup>™</sup> and Flocculating Clarifiers. Two distinct motor/reducer assemblies are combined into one unit, which allows for independent speed control of the mixer/flocculator and the rake arms.



### **Lift Drive**

In heavy-duty industrial applications where torque can peak unexpectedly, both shaft and cage drive units can be provided with a lifting device to raise the rake mechanism out of the dense, settled slurry. As the rakes are raised from the slurry, the torque load decreases and operation continues, which gives the operator time to make necessary system adjustments. The operator can then slowly lower the rakes back to their original position and avoid any shutdown time during the process.

### **D25 Gearless Shaft Drive**

The D25 drive has the motor and speed reducer assembly directly mounted on the precision bearing for low-torque applications. The precision bearing eliminates the need for a submerged bearing that is common with other gearless drives and some strip-liner drives. In these low-torque applications, the main gear-to-pinion reduction is not needed.

### **Direct Shaft Drive**

For light-duty applications, WesTech provides a drive unit that connects the center drive shaft directly to the output of the cycloidal speed reducer.

### **Multiple Pinion Drive**

Heavy-duty industrial applications often require more torque than a single pinion can provide. In such cases, multiple pinions are used to drive a single precision bearing, which allows the torque design to double, triple, or quadruple in value.

### **Peripheral Drive**

Rim drives travel along the periphery of a concrete tank and pivot the sludge collection system around the center support column. For large-diameter tanks, rim drives can provide both mechanical and cost advantages. In minerals applications, heavy-duty traction drives are used for large-diameter units with very high solids throughput requirements. Traction drives are designed to travel along either a smooth or geared rail, depending on site-specific torque requirements.







info@westech-inc.com Salt Lake City, Utah, USA

© WesTech Engineering, LLC 2021

228

Represented by:



### 12/28/2021 3:39 PM WESTECH-INC\MPEARSON Page 1 of 10

Job No.	Year		Location			Qty	Size	Equipment/Model
22200	0	CITY OF LAUREL WWTP IMPROVEMENTS BNR UPGRADE	LAUREL	MT	US	2		CANCELLED CLC18
23163	0	FREDERICTON WWTF SECONDARY CLARIFIER EQUIPMENT	FREDERICTO N	NEW BRUNSWI CK	CA	1	120 Feet	Secondary Clarifier CLC18G
23829	0	CENTRAL WWTP EXPANSION	PFLUGERVILL E	ТХ	US	2	115' DIA	Secondary Clarifiers Phase 2 CLC18G
24632	0	WESTVILLE PHASE 2 IMPROVEMENTS	INDIANAPOLIS	IN	US	1	45' DIA x 14' SWD SECONDARY	CLARIFIER CLC18G
3427	1984	PINOLE, CA WWTP/KAWEAH CONSTR.	PINOLE	CA	US	2	45' DIA.	CLARIFIERS SUCTION CLC18
3502	1985	ODELL, OR WWTP/COPENHAGE N UTILITIES	ODELL	OR	US	1	45' DIA.	CLARIFIER CLC18
3506	1985	LEWISTOWN, MT WWTP/MORGAN OSWOOD CONSTR.	LEWISTOWN	MT	US	2	70' DIA.	CLARIFIERS CLC18
3587	1986	BEATRICE MEATS/WALLACE, NC	WALLACE	NC	US	1	45' DIA.	CLARIFIER CLC18
3609	1986	KILGORE, TX WTP	KILGORE	ТХ	US	2	70'	CLARIFIERS SUCTION CLC18
3628	1986	IBM/FISHKILL, NY	HOPE JUNCTION	NY	US	2	45' DIA.	CLARIFIERS CLC18
3563	1986	LONGMONT, CO WWTP	LONGMONT	СО	US	2	120' DIA.	CLARIFIERS SUCTION HEADER CLC18
3724	1987	HARVEY, LA STP	HARVEY	LA	US	1	70' DIA.	CLARIFIER CLC18
3723	1988	SUNNYSIDE, WA WWTP	SUNNYSIDE	WA	US	1	85' DIA.	CLARIFIER CLC18
3748	1988	FALLBROOK, CA WWTP	FALLBROOK	CA	US	1	75' DIA.	CLARIFIER CLC18
3737	1988	SILOAM SPRINGS, AR WWTP	SILOAM SPRINGS	AR	US	2	84' DIA.	CLARIFIERS CLC18

### Westech

Installation List

### 12/28/2021 3:39 PM WESTECH-INC\MPEARSON Page 2 of 10

Job No.	Year		Location			Qty	Size	Equipment/Model
3778	1988	MERIDIAN, ID WWTP	MERIDIAN	ID	US	1	80' DIA.	CLARIFIER CLC18
3707	1988	GROVER STREET WWTP/PRITCHARD, AL	PRICHARD	AL	US	1	105' DIA.	CLARIFIER CLC18
3835	1989	GROVER STREET WWTP/PRITCHARD, AL	PRICHARD	AL	US	1	85' DIA.	CLARIFIER CLC18
3996	1990	EMPIRE, MN	FARMINGTON	MN	US	1	80' DIA.	SUCTION HEADER CLARIFIER CLC18
3996	1990	EMPIRE	FARMINGTON	MN	US	1	90' DIA.	CLARIFIER CLC18
4065	1991	HARDEEVILLE, SC WWTP	HARDEEVILLE	SC	US	1	60' DIA.	CLARIFIER SUCTION CLC18
4225	1992	MANTECA, CA WWTP/KAWEAH CONSTR.	MANTECA CENTER	CA	US	1	85' DIA.	CLARIFIER CLC18
4225	1992	MANTECA, CA WWTP/KAWEAH CONSTR.	MANTECA CENTER	CA	US	2	85' DIA.	CLARIFIERS RETROFIT CLC18
4273	1993	RIVER ROAD WRP/AMARILLO, TX	AMARILLO	ТХ	US	1	85' DIA.	CLARIFIER CLC18
4273	1993	RIVER ROAD WRP/AMARILLO, TX	AMARILLO	ТХ	US	1	70' DIA.	CLARIFIER CLC18
4541	1994	TOLUCA	TOLUCA	MX	MX	3	45 METER	CLARIFIERS SUCTION HEADER CLC18
4454	1994	MAUMEE RIVER WWTP/LUCAS COUNTY, OH	Waterville	ОН	US	1	105' DIA.	CLARIFIER CLC18
4643	1995	HAGERSTOWN, MD/SBCCS CONSTRUCTORS	HAGERSTOW N	MD	US	2	75' DIA.	SC CLARIFIERS CLC18
4672	1995	VERNON, TX WWTP/CAJUN CONTRACTORS	VERNON	тх	US	1	65' DIA.	CLARIFIER SECONDARY CLC18
4875	1997	STURGIS, MI WWTP/ALLIED MECHANICAL	STURGIS	MI	US	1	60' DIA	CLARIFIER CLC18



### 12/28/2021 3:39 PM WESTECH-INC\MPEARSON Page 3 of 10

Job No.	Year		Location			Qty	Size	Equipment/Model
4878	1997	TZ OSBORNE WWTP/GREENSBOR O, NC/UNITARY SYSTEMS	MC LEANSVILLE	NC	US	2	130' DIA.	CLARIFIERS HEADER CLC18
4914	1997	LARGO WWRF CLEARWATER, FL	CLEARWATER	FL	US	1	80' DIA.	CLARIFIER SUCTION CLC18
18041	1998	CARGILL HIGH RIVER, AB, CAN	HIGH RIVER	AB	CA	1	60' DIA.	CLARIFIER CLC18
5123	1998	BASF GEISMAR, LA	GEISMAR	LA	US	1	82' DIA	CLARIFIER CLC18
18141	1999	LINDEN, MI WWTP/GENESEE COUNTY	Linden	МІ	US	1	70' DIA	CLARIFIER CLC18
18310	1999	ELLIJAY	ELLIJAY	GA	US	2	90' DIA	CLARIFIERS FLAT FLOOR CLC18
18341	2000	HOWELL, MI WWTP/JOHN E GREEN CO.	HOWELL	МІ	US	1	55' DIA	CLARIFIER FLAT FLOOR CLC18
18852	2002	TRACY, CA	TRACY	CA	US	1	100' DIA	CLARIFIER FLAT FLOOR CLC18
18938	2002	ASHLAND, OH	ASHLAND	ОН	US	2	80' DIA	CLARIFIER RETROFITS FLAT FLOOR CLC18
19285	2004	LONGMONT WWTP	LONGMONT	CO	US	2	120' DIA	CLARIFIER RETROFITS CLC18
19265	2004	DISCOVERY BAY	DISCOVERY BAY	CA	US	1	50' DIA	CLARIFIER CLC18
19267	2004	OTSEGO, MN WWTF/RICE LAKE CONSTR.	OTSEGO	MN	US	2	40' DIA	CLARIFIERS CLC18
19434	2004	LEWISTOWN	LEWISTOWN	MT	US	2	70' DIA	CLARIFIER RETROFITS CLC18
19413	2004	SLIDELL TERRACE AVENUE	SLIDELL	LA	US	2	85' DIA	CLARIFIER RETROFITS CLC18G
19489	2005	EVELETH, MN WWTP/RICE LAKE CONSTR.	EVELETH	MN	US	1	52.5' DIA	CLARIFIER CLC18

### Westech

Installation List

### 12/28/2021 3:39 PM WESTECH-INC\MPEARSON Page 4 of 10

Job No.	Year		Location			Qty	Size	Equipment/Model
19622	2005	OTSEGO EAST	OTSEGO	MN	US	2	65' DIA	CLARIFIERS CLC18
19682	2005	BP WHITING, IN	HAMMOND	IN	US	1	150' DIA	CLARIFIER CLC18
19807	2006	LITITZ	LITITZ	PA	US	1	70' DIA	CLARIFIER RETROFIT COMPONENTS CLC18
19768	2006	OAKS WWTP	OAKS	PA	US	2	110' DIA	CLARIFIERS CLC18
19925	2007	EUGENE- SPRINGFIELD WPCF	EUGENE	OR	US	2	130' DIA	CLARIFIERS CLC18G
19855	2007	WHITE WATER CREEK WPCF/FAYETTEVILL E, GA/REYNOLDS	FAYETTEVILL E	GA	US	4	50' DIA	CLARIFIERS CLC18
19938	2007	LARGO	CLEARWATER	FL	US	2	80' DIA	CLARIFIERS CLC18
19837	2007	ELLIS CREEK	PETALUMA	CA	US	2	125' DIA	CLARIFIERS CLC18
19925	2007	EUGENE- SPRINGFIELD WPCF	EUGENE	OR	US	8	130' DIA	CLARIFIERS CLC18G
20410	2008	VALERO CORPUS CHRISTI, TX	CORPUS CHRISTI	ТΧ	US	2	85' DIA	CLARIFIERS CLC18
20627	2009	LEXINGTON	LEXINGTON	ОН	US	2	34' DIA	CLARIFIERS CLC18
20635	2009	FOSTER POULTRY FARMS	LIVINGSTON	CA	US	2	115' DIA	CLARIFIERS CLC18
20657	2009	LARGO WWRF	CLEARWATER	FL	US	3	80' DIA	CLARIFIERS CLC18
20672	2009	CHELSEA WWTP	CHELSEA	МІ	US	2	50' DIA	CLARIFIERS CLC18G
20770	2009	BOZEMAN, MT WWTP	BOZEMAN	MT	US	2	85' DIA	CLARIFIER CLC18G
20931	2010	ZUAZUA-CLYCSA	ZUAZUA		MX	2	65' DIA	CLARIFIERS CLC18
20850	2010	NORESTE	MONTERREY		MX	1	48 M	SUCTION HEADER CLARIFIER CLC18
20850	2010	NORESTE	MONTERREY		MX	1	48 M	SUCTION HEADER CLARIFIER CLC18

### Westech

Installation List

### 12/28/2021 3:39 PM WESTECH-INC\MPEARSON Page 5 of 10

Job No.	Year		Location			Qty	Size	Equipment/Model
20881	2010	ELI LILLY	CAROLINA	PR	PR	1	40' DIA X 17'9"	SUCTION HEADER CLARIFIER CLC18
20941	2010	MAUMEE RIVER STP	WATERVILLE	ОН	US	2	105' DIA	CLARIFIERS FLAT FLOOR CLC18
21216	2011	PESQUERIA	DE LOS LERMAS GUADALUPE N L		MX	1	70' DIA	CLARIFIER CLC18
21032	2011	SPRING CREEK, IL/ WWTP/PLOCHER CONSTRUCTION	SPRINGFIELD	IL	US	6	140' DIA	SECONDARY CLARIFIERS CLC18G
21178	2011	LEPRINO FOODS WAVERLY, NY	WAVERLY	NY	US	2	33 FT	SUCTION HEADER CLARIFIERS CLC18
21284	2011	ENTERPRISE WWTF IMPROVEMENTS	ENTERPRISE	AL	US	2	90' DIA	SUCTION HEADER CLARIFIERS CLC18G
21452	2012	LEWISTOWN WWTF	LEWISTOWN	PA	US	3	60' DIA	SECONDARY CLARIFIER CLC18
21466	2012	MOUNT MORRIS, IL WWTF/WILLIAMS BROS CONSTR.	MOUNT MORRIS	IL	US	2	55' DIA	FINAL CLARIFIERS CLC18G
21683	2012	CERRALVO WWTP	Cerralvo	Nuevo Leon	MX	1	32.8' DIA	CLARIFIER CLC18
21687	2013	BURLINGTON, WI WWTF/STAAB CONSTRUCTION CORP.	BURLINGTON	WI	US	2	85' DIA	SUCTION HEADER CLARIFIERS CLC18G
21615	2013	ALEXANDRIA WWTP	ALEXANDRIA	LA	US	2	105' DIA	COP CLARIFIERS CLC18G
21698	2013	CRESTON WWTP	CRESTON	BC	CA	2	50' DIA	SUCTION HEADER CLARIFIERS CLC18G
21894	2013	MADISON TWP, OH WWTP/AP OHORO CO.	MADISON	ОН	US	2	104' DIA	SUCTION HEADER CLARIFIERS CLC18
21882	2013	ST PAUL PARK ADRIEN, MN/MARATHON	ADRIEN	MN	US	2	55'	CLARIFIERS CLC18



### 12/28/2021 3:39 PM WESTECH-INC\MPEARSON Page 6 of 10

Job No.	Year		Location			Qty	Size	Equipment/Model
22103	2014	BROOKINGS MUNICIPAL UTILITIES	BROOKINGS	SD	US	3	94' DIA	CLARIFIER CLC18
22222	2014	ISSASA SADM	GUADALUPE	NL	MX	2	65 Feet	Drives CLC18
22007	2014	ABINGTON REGIONAL WA WWTP	CHINCHILLA	PA	US	2	80' DIA	CLARIFIER CLC18G
22197	2014	FRUITLAND WWTP PACKAGE 2	FRUITLAND	ID	US	2	70' DIA	SECONDARY CLARIFIERS CLC18
22202	2014	CHAMBERS CREEK WWTP MECH 319	UNIVERSITY PLACE	WA		1	150' DIA	SECONDARY CLARIFIER CLC18
22307	2015	DISCOVERY BAY, CA WWTP/ANDERSON PACIFIC ENG.	DISCOVERY BAY	CA	US	1	50' DIA	SUCTION HEADER SECOND. CLARIF. CLC18
22233	2015	NORTHWEST LANGLEY WWTP PHASE 1 UPGRADE	LANGLEY	BRITISH COLUMBI A	CA	3	27.5 M	SECONDARY CLARIFIER CLC18G
22393	2015	RM CLAYTON WRF	ATLANTA	GA	US	1	150' DIA	CLARIFIER RETROFIT EQUIPMENT CLC18
22410	2015	HOWELL WWTP	Howell	МІ	US	1	55' DIA	CLARIFIER CLC18
22423	2015	ADA WWTP EXPANSION	ADA	ОН	US	3	60' DIA	SECONDARY CLARIFIERS CLC18G
22514	2015	LOGANSPORT WWTP	LOGANSPORT	IN	US	2	75' DIA	Secondary CLARIFIER CLC18G
22588	2016	LONGMONT WWTP AMMONIA TREATMENT AND BIOSOLIDS	LONGMONT	CO	US	1	120' DIA	Secondary Dual Suction Header CLC18
22781	2016	CHERRY POINT, NC MARINE CORP WWTP/CLEARWATE R	CHERRY POINT	NC	US	2	75' DIA	Clarifier Repl. Components CLC18
22459	2016	BACK RIVER WWTP BALTIMORE, MD	BALTIMORE	MD	US	12	120' DIA	CLARIFIERS CLC18G
22653	2016	EDGERTON WWTF	EDGERTON	WI	US	2	50' DIA	Secondary Clarifiers CLC18

### Westech

Installation List

### 12/28/2021 3:39 PM WESTECH-INC\MPEARSON Page 7 of 10

Job No.	Year		Location			Qty	Size	Equipment/Model
22723	2016	LOUISVILLE, CO WWTP	LOUISVILLE	CO	US	3	60' DIA	Secondary Clarifiers CLC18
22657	2016	PTAR AGUASCALIENTES MEXICO	CIUDAD DE MÉXICO	MEXICO	MX	4	46m dia	CLARIFIER CLC18
22859	2016	MONROE, WA WWTP	MONROE	WA	US	1	42' DIA	SS Secondary Clarifier CLC18
22854	2016	WEST BAY COUNTY WWTP SECONDARY CLARIFIER	BAY CITY	MI	US	1	85' DIA	Secondary Clarifier CLC18G
22834	2017	FY'16 HAIKEY CREEK WWTP CAPITAL EQUIP REPLACEMENT	BROKEN ARROW	ОК	US	2	110' DIA	Final Clarifiers CLC18G
22588	2017	LONGMONT WWTP AMMONIA TREATMENT AND BIOSOLIDS	LONGMONT	СО	US	2	120' DIA	Seconday Retrofit Header CLC18
23043	2017	CONAGRA	RICHLAND	WA	US	1	71.3'	CLARIFIER CLC18
23111	2017	SHELL CHEMICAL COMPANY	NORCO	LA	US	1	158' dia	CLARIFIER CLC18
22957	2017	FT. MADISON, IA WWTP/LEANDER CONSTRUCTION	FORT MADISON	IA	US	2	100' DIA	Final Clarifiers CLC18G
23033	2017	CONOCOCHEAGUE WWTP WASHINGTON COUNTY, MD	WILLIAMSPOR T	MD	US	1	90' DIA	Final Clarifier No. 3 CLC18
22827	2017	SAN MATEO WWTP	SAN MATEO	CA	US	4	75' DIA	316SS Secondary Clarifiers CLC18G
23033	2017	CONOCOCHEAGUE WWTP WASHINGTON COUNTY, MD	WILLIAMSPOR T	MD	US	2	90' DIA	Final Clarifier No. 1&2 Rehab CLC18
23156	2017	CHESTERTON WWTP CLARIFIER RENOVATION PHASE 3	PORTER	IN	US	1	65' DIA	Secondary Clarifier Retrofit CLC18



### 12/28/2021 3:39 PM WESTECH-INC\MPEARSON Page 8 of 10

Job No.	Year		Location			Qty	Size	Equipment/Model
23163	2017	FREDERICTON WWTF SECONDARY CLARIFIER EQUIPMENT	FREDERICTO N	NEW BRUNSWI CK	CA	1	120' Dia	Secondary Clarifiers CLC18G
23153	2017	BILLINGS WRF	Billings	MT	US	3	140' DIA	Secondary Clarifiers CLC18
23086	2018	EL MORRO	LAREDO	тх	US	2	42M DIA	CLARIFIER CLC18
22814	2018	ORANGE COUNTY SOUTH WRF PHASE V IMPROVEMENTS	ORLANDO	FL	US	1	165' DIA	SECONDARY CLARIFIER MECHANISM CLC18G
23145	2018	COEUR D'ALENE TERTIARY TREATMENT PHASE 2	COEUR D ALENE	ID	US	1	75' DIA	Secondary Clarifier CLC18G
23344	2018	CABIN CREEK WRRF IMPROVEMENTS	GRIFFIN	GA	US	2	50' DIA.	Secondary Clarifiers CLC18
23338	2018	SOUTHEAST WWTP IMPROVEMENTS	ALTUS	ОК	US	1	90' DIA.	Secondary Clarifier CLC18G
22971	2018	AKRON, OH WRF STEP FEED PHASE 2	AKRON	ОН	US	18	100' DIA	Final Clarifiers CLC18G
23260	2018	WATERLOO WWTP SECONDARY CLARIFIERS #1 & #2	WATERLOO	ONTARIO	CA	2	120' DIA.	SS Secondary Clarifiers CLC18G
23362	2018	NEWTON COUNTY RWSD IMPROVEMENTS CONTRACT B	FAIR OAKS	IN	US	2	45' DIA.	Secondary Clarifiers CLC18G
23459	2018	WEST BAY COUNTY WWTP SECONDARY CLARIFIER EQUIPMENT	BAY CITY	MI	US	1	85' DIA	Secondary Clarifier CLC18G
23524	2018	MUSTANG WWTP IMPROVEMENTS PHASE IIC & IID	MUSTANG	ОК	US	2	70' DIA	Secondary Clarifier Mechanisms CLC18G
23578	2019	SOUTH BELOIT WWTP IMPROVEMENTS	SOUTH BELOIT	IL	US	2	80' Dia.	Secondary Clarifiers CLC18G
23647	2019	FAIRBURY CSO LONG TERM CONTROL PLAN	FAIRBURY	IL	US	2	50' Dia.	Secondary Clarifiers CLC18G



### 12/28/2021 3:39 PM WESTECH-INC\MPEARSON Page 9 of 10

Job No.	Year		Location			Qty	Size	Equipment/Model
23775	2019	LEBANON WWTP EXPANSION	LEBANON	IN	US	1	90' DIA	Secondary Clarifier Mechanism CLC18G
23547	2019	DURHAM AWWTF PHASE 5 SECONDARY TREATMENT SYSTEM	TIGARD	OR	US	1	151' DIA	Secondary Clarifier CLC18G
23812	2019	CARTERSVILLE WPCP NUTRIENT REMOVAL UPGRADE	CARTERSVILL E	GA	US	1	135' DIA	CLARIFIER CLC18G
23691	2020	SOUTH SAN FRANCISCO WQCP	S SAN FRANCISCO	CA	US	1	110' DIA	Secondary Clarifier CLC18G
23772	2020	LARGO WWRF BIOLOGICAL TREATMENT IMPROVEMENTS	CLEARWATER	FL	US	1	80' DIA	CLARIFIER CLC18
23812	2020	CARTERSVILLE WPCP NUTRIENT REMOVAL UPGRADE	CARTERSVILL E	GA	US	2	135' DIA	CLARIFIER CLC18G
23855	2020	KRAFT-HEINZ ORE- IDA PLANT	ONTARIO	OR	US	1	140' x 20'	CLARIFIER CLC18G
24021	2020	PALO ALTO PUBLIC WORKS DEPARTMENT CLARIFIERS 4 & 6	PALO ALTO	CA	US	1	120' DIA	CLARIFIER CLC18G
23829	2020	CENTRAL WWTP EXPANSION	PFLUGERVILL E	ТХ	US	1	115' DIA	Secondary Clarifier Phase 1 CLC18G
24117	2020	SHERIDAN WASTEWATER SYSTEM PEAK FLOW IMPROVEMENTS	SHERIDAN	IN	US	1	65' DIA	Secondary Clarifier CLC18
24145	2021	GREENWOOD STP CLARIFIER UPGRADES	Kingston	NOVA SCOTIA	CA	2	50' DIA	SS Secondary Clarifiers CLC18G
24170	2021	ALUM CREEK WRF SECONDARY CLARIFIER UPGRADE	LEWIS CENTER	ОН	US	4	135' DIA	304SS Secondary Clarifiers CLC18G
24183	2021	GUAYAMA, PUERTO RICO	ROCKFORD	IL	PR	2	120'	CLARIFIER CLC18G



### 12/28/2021 3:39 PM WESTECH-INC\MPEARSON Page 10 of 10

Job No.	Year		Location			Qty	Size	Equipment/Model
24147	2021	FOREST GROVE WWTF SECONDARY CLARIFIER IMPROVEMENTS	FOREST GROVE	OR	US	1	120' DIA	Secondary Clarifier CLC18G
24198	2021	HAIFA	SOUTH INDUSTRIAL PARK	ACRE	IL	4	45m	CLARIFIER CLC18G
24256	2021	HOWELL WWTP IMPROVEMENTS	HOWELL	MI	US	1	55' DIA	Secondary Clarifier Mechanism CLC18G
23934	2021	PONTIAC, IL WWTP IMPROVEMENTS	PONTIAC	IL	US	1	60' DIA	CLARIFIER CLC18G
24090	2021	MCCAIN FOODS OTHELLO	OTHELLO	WA	US	1	100' x 19'	CLARIFIER CLC18G
24362	2021	HENDRICKS COUNTY WWTP PHASE VI EXPANSION	AVON	IN	US	1	60' DIA.	Secondary Clarifier Mechanism CLC18G
24420	2021	THOMASTON USDA SEWER SYSTEM IMPROVEMENTS	THOMASTON	GA	US	1	100' DIA.	Secondary Clarifier Mechanism CLC18G
24372	2021	BROOKFIELD WRF IMPROVEMENTS	MASURY	ОН	US	2	50' DIA	304SS Secondary Clarifier Mech CLC18G
24533	2022	JAMES WWTP CLARIFIER COMPONENT REPLACEMENT	ABBOTSFORD	BC	CA	1	100' DIA	CLARIFIER CLC18G
24379	2023	ALCOSAN NORTH END PLANT EXPANSION	PITTSBURGH	PA	US	2	141' DIA.	PA SS Secondary Clarifiers CLC18
			Total Qty =		•	272		

APPENDIX B-2 Aeration System









Customer Reference: Rodney WWTP Upgrade, P# 215817 Aerzen Reference: SQ-21-214024a Submitted by: Nikita Assilamehoo nikita.assilamehoo@aerzen.com

### SCOPE OF SUPPLY

3 Aerzen Generation 5 Blower Package - GM 7L DN 80 - Pressure - including: Aerzen GM 7L Blower

Drive Motor: 15hp, 1800rpm, TEFC, 575V/60Hz

Base with integrated reactive type discharge silencer Intake filter silencer Hinged motor support as automatic belt tensioning device Set of vibration isolation mounts Narrow v-belt drive with guard - 1 set Spring loaded relief valve Discharge manifold with externally accessible integrated check valve Flexible connector with clamps for schedule 40 pipe, discharge

#### Instruments

Pressure gauge c/w isolation ball valve (3x) Dirty filter indicator (3x)

### **Optional Accessories**

Acoustic Enclosure - Indoor/Outdoor Inlet flexible sleeve - DN 80 (3") Motor Protection - 1 Thermistor/Ph

### **Optional Instruments**

Temperature switch c/w thermowell 120V (3x) Pressure switch 120V (3x) 15Hp - 575V VFD - NEMA 12 - Constant Torque c/w Disconnect (Shipped Loose) (3x)

#### **Optional Spare Parts**

1 Year Maintenance Kit (1 x V-Belt Set, 1 x Intake Filter) 2 Year Maintenance Kit (1 x V-Belt Set, 1 x Oil Change (Delta Lube), 2 x Air Filter)

Connection Points: Intake Connection: Local Discharge Connection: DN 80 - 3"

Exclusions: See page 2



Customer Reference: Rodney WWTP Upgrade, P# 215817 Aerzen Reference: SQ-21-214024a

### PERFORMANCE DATA

### Aerzen Blower Package - GM 7L DN 80 - Pressure

### Configuration:

G5

			Min F	
Conditions:	Sm <sup>3</sup> /min	332	71	
Flow at inlet conditions	m³/min	6.24	1.34	
	lcfm	221	47	
Inlet pressure ( abs )	bar	0.988	0.988	
	Psi	14.33	14.33	
Pressure differential	mbar(a)	483	/83	
	Psig	7.0	7.0	
Inlet temperature	°C	40	40	
Discharge temperature	°C	96	142	
Blower speed	RPM	3905	1520	
Blower maximum speed	RPM	4800	4800	
% of maximum blower speed		81%	32%	
Power required at shaft (with accessories) **	kW	7.3	2.7	
	HP	9.7	3.6	
Total Power (Wire to Air):	HP	10.8	4.0	
Motor rating	НР	15.0		
Motor speed	RPM	1765	687	
Motor frequency	Hz	60	23	
Noise level without acoustic hood	dB(A)	90		

Noise level with acoustic hood

B(A) 90 73 dB(A)

### Tolerances as per EN 10204, in accordance with standard ISO 1217:

Flow at inlet conditions / Power required at shaft +/- 5%

### Blower package noise level:

Free field measurement at 1m from the complete blower package ( tolerance +/- 2 dB(A) )

#### Tests and measurements:

Blower stage: 1.5 hour flow test at the factory ( Germany ) on a calibrated test bed, at maximum operating conditions and according to DIN 1945. acceptance tolerance: +/- 5%. A complete test report is available upon request.

### On Site Commissioning

Available upon request, charges to be advised.

- Any commissioning activity is subject to two weeks prior notice and completion of commissioning checklist. - Any on-site activity outside the time indicated will be billed according to the Aerzen Standard Rate Sheet

#### Exclusions

Control Panels, Motor Starters, Piping and Electrical Connections \* Unloading valves are required for reduced voltage starters

### Warranty

Blowers including accessories are warranted for a period of 12mo / max 18mo after delivery and after provisional acceptance of the work against defects in workmanship and design. This warranty does not cover wearing parts unless such parts are defective during shipping / commissioning. As per Aerzen standard warranty terms.

\*\* Power at shaft excludes drive motor and belt drive



Customer Reference: Rodney WWTP Upgrade, P# 215817 Aerzen Reference: SQ-21-214024a

### PRICING

	<u>Unit Cost</u>	Extended Cost	
Pressure Package - GM 7L DN 80	11,720.00 \$	35,160.00 \$	3 Units
<u>OPTIONS</u>			
Acoustic Enclosure - Indoor/Outdoor	2,880.00 \$	8,640.00 \$	3 Units
Inlet flexible sleeve	120.00 \$	360.00 \$	3 Units
Motor Protection - 1 Thermistor/Ph	260.00 \$	780.00 \$	3 Units
Optional Instruments			
Temperature Switches	490.00 \$	1,470.00 \$	3 Units
Pressure Switches	460.00 \$	1,380.00 \$	3 Units
VFD with its stand	4,400.00 \$	13,200.00 \$	3 Units
Optional Spare Parts			
1 Year Maintenance Kit	200.00 \$	600.00 \$	3 Units
2 Year Maintenance Kit	380.00 \$	1,140.00 \$	3 Units

TERMS AND CONDITIONS							
INCOTERMS: Delivery:	EXW - Aerzen Canada Collect						
Start-up Assistance / Operator Training:	As noted - page 2						
Funds: Payment terms:	CAD See schedule below Subject to credit approval and final destination of goods						
Payment Schedule:	15% on submittal of approval drawings 85% on readiness to ship - Aerzen Canada						
Taxes:	G.S.T. extra, P.S.T. charged in Quebec only						
Prices firm until:	5/21/2022						
Packing:	Heavy duty wooden skid with polyethylene wrapping included * Skeleton Frame * Special packing can be quoted upon request.						
Warranty:	12mo / max 18mo after delivery						
Estimated Delivery:	10-12 Weeks						

- to avoid warranty conflicts, we recommend that our start-up services be ordered and the

inspection and operation procedures in our manual be respected.
- The goods remain the property of Aerzen Canada until full payment. Extended payment delays may void the warranty.

Past due invoice amounts carry an interest charge calculated at 24% apr.

Aerzen Canada reserves the right to change product specifications without prior notice.

- Aerzen can hold ready units free of charge for up to 3 weeks past agreed due date, after which storage fees will apply.

APPENDIX B-3 Spiral Screen and FRP Enclosure

claroglobal.com

# Claro

Rodney WPCP 19 January 2022 Project: Municipal Authority: West Elgin, ON Ref#: Rodney, ON; 21221-Q-00 **Consultant Contact** Tariq Abou Jarboua, Project Designer, R.V. Anderson Associates Ltd., 557 Southdale Road East, Suit 200, London, On N6E 1A2; T.: 519.681.9916 x5023; C.: 519.697.8201; TAbouJarboua@rvanderson.com Claro Representative: Scott Lenhardt, P.Eng., Pro Aqua, Inc., 264 Bronte Street South, Unit #7, Milton (Ontario) ON L9T 5A3; T.: 905.864.9311 (228); C.: 905.330.9244; scott@proaquasales.com Subject: Budgetary costs proposal for one (1) spiral screen system: one (1) in-channel configuration spiral screen c/w continuous automatic hygienic bagger, control panel, davit crane, & custom FRP enclosure.

### [Part C]: Budgetary Costs – Village of Rodney, ON

- Item 1: One (1) Claro Shaftless Spiral Conveyor Screen Model SS 300-2800-6mm
- <u>Item 2</u>: One (1) Control Panel (Outdoor Installation) Incl. Ultrasonic Level Sensor & Float Switch + Local E-Stop Station
- Item 3: One (1) Custom FRP Enclosure
- Item 4: One (1) Davit Crane System
- <u>Item 5</u>: Claro Technical Submittal, Installation Instructions & Commissioning Services, and O&M Manuals
- Item 6: Shipping, Brokerage & Insurance to Village of Rodney, ON project site included

### • •

### [Part D]: Terms of Delivery

- Terms of Delivery: DDP Village of Rodney project site, ON; each piece of equipment in a crate (or) on a specially-built wooden pallet and in a marine container delivered on a chassis truck or within a conventional transport truck; contractor responsible for providing appropriate on-site off-loading equipment.
   Delivery Time: Submittal within 4 weeks or better if required. Delivery on site 16-22 weeks or better if required.
   Warranty: 1 year normal running time. Warranty resets upon repair.
- Terms of payment: 90% on delivery (30 days net)
  - 10% on start-up (30 days following successful start-up)
- This proposal is valid 1 month from 19 January 2022. Extensions of validity on request.



APPENDIX B-4 Alum Tank Hello Tariq,

Thank you for your recent request for quote. We are pleased to be of service to you and your team. As per your request, I have prepared the quote below and attached drawing(s) for your reference.

### ACO model: CT-2455, HDPE (1.9s.g.) Closed Top Tank; \$ 10,532.00 EA/net

Dimensions: 90"Ø x 132" tall Capacity: 2,450 IG / 2,940 USG / 11,000 L

Complete with:

1, 24" HDPE bolted lid with gasket

1, 8" PVC Spool Flange with Donker Bolts

1, Steel Mixer mount bridge with Donker Bolts finished in white powder coat (Max. mixer weight of 250 lbs) with 12" diameter hole in top of tank

3, 1-1/2" FNPT PVC Tank Adapter

1, 2" FNPT PVC Tank Adapter

4, Steel lifting lug assembly with Donker bolts

1, Stainless Steel engraved ID Tag with HDPE mounting bracket (4" x 6")

Gaskets: EPDM

Delivery: Approx. 9-11 weeks

Lead time is subject to change. Lead time is to be confirmed once drawings are approved, if applicable. All sales are final. Applicable taxes are extra. FOB ACO in Pickering, ON. Quote is valid for thirty (30) days only.

(Please note that all quotes containing steel products are only valid for 7 days) All funds are CAD.

From: Tariq Abou Jarboua <<u>TAbouJarboua@rvanderson.com</u>> Sent: December 13, 2021 2:20 PM To: Bill Murray <<u>william@acotainers.com</u>>

Subject: Rodney WPCP Upgrade Project # 215817, Alum Storage Tank

Dear William

You are kindly requested to quote for one Alum Storage Tank to replace the existing FRP 30,000 Tank. Requested Specs:

One PE (ACO Container Sys.), Volume: 10,000 L, Vertical Tank to store Alum solution.

The tank to be completely self-supporting without the need for ribs of stiffeners. Tank Fittings:

- Min 610 mm dia Access Lid with handles for easy removal
- Min 200 mm dia level sensor nozzle (flanged)
- Min 300 mm dia opening for a portable mixer c/w reinforced bracket for a mixer to be clamped or bolted on.
- 40 mm dia nipple for make-up water connection
- 40 mm dia nipple for suction header connections
- 50 mm dia vent nipple
- 40 mm dia drain valve and plug
- Gasket's material to be compatible with product to be stored
- Lifting lugs
- Label and Tag



### NOTES:

1. TANK IS MANUFACTURED FROM HDPE OR XLPE. (1.5 OR 1.9 OR 2.2 SG)

2. TANK IS MANUFACTURED TO ASTM-D-1998 STANDARD. ALL TANK DIMENSIONS ARE SUBJECT TO A +/-3% DIMENSIONAL TOLERENCE.
 FLEXIBLE COUPLINGS ARE REQUIRED FOR ALL EXTERNAL PIPING.
 ALL FITTING GASKETS ARE EPDM OR VITON.

6. ACO RECOMMENDS ALL FLANGE GASKETS TO BE MIN. 1/4" THICK. 7. ON LARGER TANKS SOME MECHANICAL FITTINGS MAY NEED TO BE REMOVED IN ORDER TO AVOID WIDE OR OVERSIZED LOADS DURING TRANSPORT.

8. HDPE ALIGNMENT WEDGES MAY BE INSTALLED BY ACO ON SOME TOP FITTINGS TO KEEP THEM PERPENDICULAR TO THE GROUND.



	MATEF	RIALS LIST					
MS	DESCRIF	DESCRIPTION					
<b>`</b>	CT-2455 CLOSE	D TOP TANK					
i	16" LID WITH LOC	CKING STRAP					
		$\longrightarrow$					
	(B)						
			)				
		No. of the second secon					
G							
$\zeta$							
			/				
			, ,				
	1 NOV-01-18	1 NOV-01-18 ADDED PARTING LINE					
	REV DATE	REV DATE DESCRIPTION REVISIONS					
	CUSTOMER						
	2,450 IG CLOSED TOP 1	TANK PURCHASE ORDER NO:					
		PURCHASER'S EQUIP. NO	): 				
	THIS DRAWING IS THE PROPERTY OF						
	ROTOPLAST INC. AND SHALL NOT BE COPIED		AII	INE	K		
	OR TRANSFERRED WITHOUT THE WRITTEN	<b>VIII</b> ) 579	SIE	:MS	D		
	CONSENT OF ROTOPLAST INC.	A divisio	n of Rot	oplast li	nc.		
		ACO CONTAINER SYSTEMS	SIGNED				
	ENGINEERS SEAL	DIVISION OF ROTOPLAST INC. DR 794 McKAY ROAD CHI	AWN ECKED	V	VM		
		PICKERING, ONTARIO, CANADA API TEL: 905-683-8222 SC/	PROVED	) N.	T.S.		
	DWG No		ΓE	02-03 RE	3-2016 V <b>1</b>		
		01-2400					

APPENDIX C Rodney WPCP Upgrades Desktop Analysis and BioWin Modeling

### Rodney WPCP Desktop Analysis and BioWin Modeling

		Current Operation	Current Operation	Current Operation	Current Operation	Rated Capacity	Rated Capacity	Rated Capacity	Rated Capacity Max
Parameter	Unit	Avg	Avg	Max	Max	Avg Month	Avg Month	Max Month	Month
		Value	Value	Value	Value	Value	Value	Value	Value
Average day flow (ADF)	m³/d	360	360	360	360	590	590	590	590
Peak day flow (PDF)	m <sup>3</sup> /d	1,972	1,972	1,972	1,972	2,333	2,333	2,333	2,333
Peak hourly flow (PHF)	m³/d	2,333	2,333	2,333	2,333	2,333	2,333	2,333	2,333
cBOD₅	mg/L	110	110	235	235	110	110	235	235
TSS	mg/L	120	120	263	263	120	120	263	263
VSS	mg/L	110	110	210	210	110	110	210	210
TKN	mg/L	30	30	43	43	30	30	43	43
ТР	mg/L	3.1	3.1	4.7	4.7	3.1	3.1	4.7	4.7
Temperature	°C	12	21	12	21	12	21	12	21
Extended Aeration Tanks		_							
Aeration tank volume in operation	m <sup>3</sup>	410	410	410	410	410	410	820	820
Aeration tank depth	m	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Aeration tank surface area	m <sup>2</sup>	137	137	137	137	137	137	273	273
Aeration tank HRT	h	27	27	27	27	17	17	33	33
SRT	d	15	15	15	15	15	15	15	15
Average DO	mg/L	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
MLSS	mg/L	1370	1320	3752	3654	2024	1945	2429	2347
Aeration Capacity	m³/h	167	175	315	332	292	305	509	534
Current / required air supply rate	m³/h								
Mixing air demand @0.61L/m <sup>2</sup> -sec	m³/h	301	301	301	301	300	300	600	600
Secondary Clarifiers									
Clarfier surface area	m <sup>2</sup>	74	74	74	74	74	74	74	74
RAS ratio	%	100	100	100	100	100	100	100	100
RAS flow rate	m³/d	360	360	360	360	590	590	590	590
RAS MLSS	mg/L	2684	2589	7359	7167	4000	3843	4742	4582
Surface overflow rate at ADF	m <sup>3</sup> /m <sup>2</sup> -d	5	5	5	5	8	8	8	8
Surface overflow rate at PHF	m <sup>3</sup> /m <sup>2</sup> -d	32	32	32	32	32	32	32	32
Solids loading rate at ADF	kg/m <sup>2</sup> -d	13	13	37	36	32	31	39	37
Solids loading rate at PDF	kg/m <sup>2</sup> -d	43	42	118	115	80	77	96	93
Effluent quality									
cBOD₅	mg/L	1.39	1.32	1.61	1.52	1.67	1.56	1.84	1.72
TSS	mg/L	1.66	1.66	1.79	1.78	2.91	2.9	2.88	2.87
TAN	mg/L	0.55	0.27	1.24	0.6	0.53	0.27	0.59	0.29
ТР	mg/L	0.11	0.12	0.04	0.05	0.16	0.31	0.08	0.09
Sludge Quality									
Sludge TSS	kg/d	37	35	102	99	54	52	131	127
Sludge VSS	kg/d	21	19	44	41	33	31	71	67
Flow	m³/d	13.67	13.67	13.85	13.85	13.42	13.40	27.65	27.64
TSS	%	0.3	0.3	0.7	0.7	0.4	0.4	0.5	0.5
# THE MUNICIPALITY OF WEST ELGIN RODNEY WPCP UPGRADES 2021 TENDER NO. 215817

LIST OF DRAWINGS

## GENERAL

- G100 GENERAL NOTES & STANDARD DETAILS
- G101 EXISTING SITE PLAN
- G102 EXISTING YARD PIPING
- G103 PROPOSED SITE PLAN
- G104 PROPOSED YARD PIPING
- G105 LAGOON PLAN

## <u>REMOVAL</u>

R101 SITE PLAN - REMOVALSR102 EQUIPMENT REMOVALS

## PROCESS

P001	LEGENDS & ABBREVIATIONS
P101	PROCESS FLOW DIAGRAM
P004	HYDRAULIC PROFILE



## RODNEY





ISSUED FOR 50% CLIENT REVIEW ISSUE DATE: 2022/04/22

## **GENERAL NOTES:**

- 1. ALL PLANS, SKETCHES, DRAWINGS, GRAPHIC REPRESENTATION PREPARED BY R.V. ANDERSON ASSOCIATES LIMITED ARE INSTRUMENTS OF SERVICE FOR CARRYING OUT A PROJECT. R.V. ANDERSON ASSOCIATES LIMITED RETAINS COPYRIGHT OF THESE PLANS, SKETCHES, DRAWINGS, GRAPHIC REPRESENTATIONS AND SPECIFICATIONS, WHICH MAY NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF R.V. ANDERSON ASSOCIATES LIMITED.
- EXAMINE THE DRAWINGS CAREFULLY BEFORE COMMENCING THE WORK. REPORT DISCREPANCIES, IF ANY, TO THE ENGINEER AND OBTAIN CLARIFICATION OF ADDITIONAL INSTRUCTIONS BEFORE PROCEEDING WITH THAT PART OF THE WORK.
- 3. DRAWINGS TO BE READ IN CONJUNCTION WITH CONTRACT SPECIFICATIONS.
- 4. SEWER GRADIENTS ARE PROVIDED FOR GUIDANCE PURPOSES. THE CONTRACTOR IS TO VERIFY AND TO WORK TO THE EXISTING AND NEW INVERT ELEVATIONS.
- 5. THE LOCATION OF THE EXISTING UTILITIES AND SERVICES IS APPROXIMATE ONLY. THE MUNICIPALITY OF WEST ELGIN AND ENGINEER ASSUME NO RESPONSIBILITY FOR THE ACCURACY OF THE LOCATION OF EXISTING UTILITIES AS INDICATED ON THESE DRAWINGS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE THE UNDERGROUND SERVICES LOCATED PRIOR TO ANY EXCAVATION OR CONSTRUCTION, PERFORMING TEST EXCAVATIONS, AS REQUIRED TO DETERMINE THE TRUE LINE AND ELEVATION, PRIOR TO SUBMISSION OF SHOP DRAWINGS.
- 6. THE CONTRACTOR WILL ENSURE THAT ALL EXISTING SERVICES ARE CLEARLY MARKED ON SITE, AT ALL TIMES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ALL SERVICES/UTILITIES DURING CONSTRUCTION. ALL WORK IN THE VICINITY OF EXISTING SERVICES WILL BE TO THE REQUIREMENTS OF UTILITY PROVIDED STANDARDS. CONTRACTOR TO COORDINATE WITH SPECIFIC UTILITY ORGANIZATIONS OR WITH THE OWNER.
- 7. MAINTAIN IN SERVICE ALL EXISTING UTILITY SERVICES AND STRUCTURES WITHIN THE WORK AREA, THROUGHOUT THE CONSTRUCTION. INSTALL SUPPORTS, AS REQUIRED. SUPPORT EXISTING SERVICES THROUGH CROSSINGS AND CONNECTION POINTS. REINSTATE BEDDING AND BACKFILL TO ORIGINAL CONDITIONS.
- 8. TEMPORARILY REMOVE ANY TREES/SHRUBS, ETC. , AS REQUIRED. REINSTATE THEM IN LOCATIONS DEFINED AFTER CONSTRUCTION. PROTECT IF LEFT IN PLACE.
- 9. REINSTATE THE ENTIRE AREA AFFECTED BY THE CONSTRUCTION ACTIVITIES.
- 10. WRAP ALL DIRECT BURIED VALVES, BURIED FLEXIBLE COUPLINGS AND ADJACENT EXPOSED METAL PIPE SURFACES, ON EITHER SIDE, IN A TAPECOAT TC ENVIROCOAT SYSTEM (DISTRIBUTED BY RPH DISTRIBUTORS LTD.) OR DENSO.
- 11. ALL DIMENSIONS TO BE FIELD VERIFIED BY CONTRACTOR.
- 12. ALL EXCAVATIONS FOR PIPING, CHAMBERS STRUCTURES AND OTHERS YARD WORK TO INCLUDE DEWATERING. PROVIDE AND SET IN PLACE ALL NECESSARY EQUIPMENT, DRAINAGE WELLS ETC. PRIOR TO COMMENCEMENT OF THE INSTALLATION. DEWATERING FLOWS MUST BE SETTLED (SEDIMENTATION POND OR OTHER MEANS), PRIOR TO DISCHARGE.
- 13. REMOVE AND DISPOSE OFF-SITE ALL EXCAVATED MATERIAL. NO MATERIAL SHALL BE REUSED.
- 14. INSTALL SEDIMENTATION SILTATION CONTROLS AROUND ALL AREAS DISTURBED BY THE CONSTRUCTION. REMOVE ALL SILTATION CONTROLS AND RESTORE ALL EXISTING UTILITIES, PAVED AREAS, DRIVEWAYS, SODDED/SEEDED AREAS, FENCES, ETC. TO ORIGINAL CONDITION UPON COMPLETION OF CONSTRUCTION.
- 15. THE INVERTS OF THE EXISTING MANHOLES ARE APPROXIMATE. PERFORM SURVEY AND TEST EXCAVATION TO DETERMINE THE EXACT LOCATION, SIZE AND INVERT OF THE EXISTING PIPING AT THE PROPOSED POINT OF CONNECTION AND PROVIDE THE INFORMATION TO THE ENGINEER TO CONFIRM THE DESIGN. DO NOT SUBMIT SHOP DRAWINGS AND DO NOT ORDER CHAMBERS AND PIPE UNTIL THE DESIGN IS CONFIRMED.

## LEGENDS:

HP 🔘	HYDRO POLE	HP 🔘	EXISTING HYDRO POLE
мн 🗭	MANHOLE	мн 🧼	EXISTING MANHOLE
св 🎹	CATCH BASIN	СВ	EXISTING CATCH BASIN
ғн — <b>О</b> —	FIRE HYDRANT	FH	EXISTING FIRE HYDRANT
ен – О	EFFLUENT HYDRANT	EH -O-	EXISTING EFFLUENT HYDRANT
$\bigcirc$	TREES	$\bigcirc$	EXISTING TREES

NOTE: NOT ALL SYMBOLS SHOWN NECESSARILY APPEAR IN DRAWINGS

00 ISSUED FOR 50% CLIENT REVIEW No. REVISION	22/04/22 AIM DATE BY
	CADdwa\01 Revit\A 000 3
File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 Schematics\Sheets\G100 GENERAL NOTES & STANDAR Plot: Apr. 2022, - 10:19:22 AM	D DETAILS.dwg
File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 Schematics\Sheets\G100 GENERAL NOTES & STANDAR Plot: Apr. 2022, - 10:19:22 AM	Y OF
File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 Schematics\Sheets\G100 GENERAL NOTES & STANDAR Plot: Apr. 2022, - 10:19:22 AM MUNICIPALIT West E	Y OF Igin
File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 Schematics\Sheets\G100 GENERAL NOTES & STANDAR Plot: Apr. 2022, - 10:19:22 AM MUNICIPALITY West E	Y OF Igin
File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 Schematics\Sheets\G100 GENERAL NOTES & STANDAR Plot: Apr. 2022, - 10:19:22 AM MUNICIPALITY West E	Y OF Igin
File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 Schematics\Sheets\G100 GENERAL NOTES & STANDAR Plot: Apr. 2022, - 10:19:22 AM MUNICIPALIT West E	Y OF Igin
File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 Schematics\Sheets\G100 GENERAL NOTES & STANDAR Plot: Apr. 2022, - 10:19:22 AM MUNICIPALITY West E West E CONTRACT No. 2158:	Associates Limited
File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 Schematics\Sheets\G100 GENERAL NOTES & STANDAR Plot: Apr. 2022, - 10:19:22 AM MUNICIPALITY West E West E CONTRACT No. 2158 CONTRACT No. 2158	TY OF Igin 17 Associates Limited
File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 Schematics\Sheets\G100 GENERAL NOTES & STANDAR Plot: Apr. 2022, - 10:19:22 AM MUNICIPALITY West E CONTRACT No. 2158 CONTRACT No. 2158 R.V. Anderson engineering • enviror	Y OF Igin 17 Associates Limited
File: R:V2021/215817 - West Elgin-Rodney WWTP Upgrades\10 Schematics\Sheets\G100 GENERAL NOTES & STANDAR Plot: Apr. 2022, - 10:19:22 AM MUNICIPALIT West E CONTRACT No. 2158 CONTRACT No. 2158 R.V. Anderson engineering • environ	Y OF Igin 17 Associates Limited ment • infrastructure
File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 Schematics\Sheets\G100 GENERAL NOTES & STANDAR Plot: Apr. 2022, - 10:19:22 AM MUNICIPALIT West E CONTRACT No. 2158 CONTRACT No. 2158 R.V. Anderson engineering • enviror	Y OF Igin 17 Associates Limited ment • infrastructure
File: R:V2021/215817 - West Elgin-Rodney WWTP Upgrades/10 Schematics/Sheets/G100 GENERAL NOTES & STANDAR Plot: Apr. 2022, - 10:19:22 AM MUNICIPALIT West E CONTRACT No. 2158 CONTRACT No. 2158 R.V. Anderson engineering • enviror RODNEY WPCP UPG	TY OF Igin 17 Associates Limited Inment • infrastructure
File: R:V2021/215817 - West Elgin-Rodney WWTP Upgrades/10 Schematics/Sheets/G100 GENERAL NOTES & STANDAR Plot: Apr. 2022, - 10:19:22 AM MUNICIPALITY West E CONTRACT No. 2158 CONTRACT No. 2158 R.V. Anderson engineering • enviror RCDNEY WPCP UPG	Y OF Igin 17 Associates Limited ment • infrastructure
File: R:V2021/215817 - West Elgin-Rodney WWTP Upgrades/10 Schematics/Sheets/G100 GENERAL NOTES & STANDAR Plot: Apr. 2022, - 10:19:22 AM MUNICIPALITY West E CONTRACT No. 2158 CONTRACT No. 2158 R.V. Anderson engineering • enviror RODNEY WPCP UPG LEGENDS & ABBREVIATIONS GENERAL NOTES & STANDAL	Y OF Igin 17 Associates Limited ment • infrastructure RADES
File: R:V2021/215817 - West Eigin-Rodney WWTP Upgradest10 Schematics\Sheets\G100 GENERAL NOTES & STANDAR Plot: Apr. 2022, - 10:19:22 AM MUNICIPALIT West E CONTRACT No. 2158 CONTRACT No. 2158 R.V. Anderson engineering • enviror RODNEY WPCP UPG LEGENDS & ABBREVIATIONS GENERAL NOTES & STANDAI Scale: AS SHOWN Date: Apr-22	TYOF Second Seco
File: R:2021/215817 - West Elgin-Rodney WWTP Upgradest10 Schematics/Sheets/G100 GENERAL NOTES & STANDAR Plot: Apr. 2022, - 10:19:22 AM MUNICIPALITY West E CONTRACT No. 2158 R.V. Anderson engineering • enviror R.V. Anderson engineering • enviror RODNEY WPCP UPG LEGENDS & ABBREVIATIONS GENERAL NOTES & STANDAI Scale: AS SHOWN Date: Apr-22 Drawn by: DG/OK Designed by: MEH Checked by: DME	Associates Limited ment • infrastructure RADES RADES RADES RVA Project No: 215817 DWG NO.









## EXISTING SITE PLAN





\_\_\_\_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_





## LEGENDS

		BCW-	
_	BY–		BY
		CHE -	
		DEC -	
		EFF -	
		INF -	
_	W -		W
_	Ρ –		Ρ ——
		RAS -	
		SAN -	
		SCU -	
		SLU -	
		WAS -	

EXISTING YARD PIPING

2m 0 4m 





\_\_\_\_\_

⊢					
00 No.	ISSUED FOR 50%	CLIENT REVIEW		22/04/22 DATE	AIM BY
File: F	_	gin-Rodney WWTP Upgrades\10	CADdw	g\01 Revit\A.00	
S	R:\2021\215817 - West Elg Site\Sheets\G103 PROPC	SED SITE PLAN.dwg			0.2
S Plot: 7	R:\2021\215817 - West Elg Site\Sheets\G103 PROPC Apr. 2022, - 10:19:38 AM	SED SITE PLAN.dwg			0.2
S Plot: 7	R:\2021\215817 - West Elg Site\Sheets\G103 PROPO Apr. 2022, - 10:19:38 AM			F	0.2
S Plot: /	R:\2021\215817 - West Elg Site\Sheets\G103 PROPO Apr. 2022, - 10:19:38 AM	MUNICIPALIT West E		, in	0.2
S Plot: /	R:\2021\215817 - West Elg Site\Sheets\G103 PROPO Apr. 2022, - 10:19:38 AM	MUNICIPALIT West E		, in	0.2
S Plot: /	R:\2021\215817 - West Elg Site\Sheets\G103 PROPO Apr. 2022, - 10:19:38 AM	MUNICIPALIT West E		, in	0.2
S Plot: <i>i</i>	R:\2021\215817 - West Elg Site\Sheets\G103 PROPO Apr. 2022, - 10:19:38 AM	MUNICIPALIT West E		⊧ Jin	0.2
S Plot: /	R:\2021\215817 - West Elg Site\Sheets\G103 PROPO Apr. 2022, - 10:19:38 AM	MUNICIPALIT West E	Y OI 19	, in	0.2
S Plot: /	R:\2021\215817 - West Elg Site\Sheets\G103 PROPO Apr. 2022, - 10:19:38 AM	MUNICIPALIT West E	17	in	0.2
s Plot: ,	R:2021/215817 - West Elg Site/Sheets/G103 PROPO Apr. 2022, - 10:19:38 AM	MUNICIPALIT West E CONTRACT No. 2158	17	F Jin ociates Lim	o.2
S Plot: /	R:2021/215817 - West Elg Site/Sheets/G103 PROPO Apr. 2022, - 10:19:38 AM	MUNICIPALIT West E CONTRACT No. 2158	17	F Jin ociates Lim	nited
S Plot: /		MUNICIPALIT West E	17	F Jin ociates Lim	nited
S Plot: /		MUNICIPALIT West E	17	F Jin ociates Lim	nited
S Plot: /	R:2021/215817 - West Elg Site/Sheets/G103 PROPO Apr. 2022, - 10:19:38 AM	MUNICIPALIT West E CONTRACT No. 2158	17	Pciates Lim	nited
S Plot: /		MUNICIPALIT West E	17	Pciates Lim	nited
S Plot: /		MUNICIPALIT West E	17	Pciates Lim	nited
S Plot: /		MUNICIPALIT West E CONTRACT No. 2158 R.V. Anderson engineering • enviro	17 Assonment	pciates Lim	nited
SPlot:	RODNE	MUNICIPALIT West E CONTRACT No. 2158 R.V. Anderson engineering • enviro	17 Assonment	Pciates Lime	nited
S Plot: /	RODNE	MUNICIPALIT West E CONTRACT No. 2158 R.V. Anderson engineering • enviro Y WPCP UPG	17 Assonment	Pciates Lime Infrastructure	nited
Scale	RODNE	MUNICIPALIT West E CONTRACT No. 2158 R.V. Anderson engineering • enviro EY WPCP UPG GENERAL	17 Assonment	Pciates Lim infrastructure	o.2
S Plot: /	RODNE RODNE RODNE	MUNICIPALIT West E CONTRACT No. 2158 R.V. Anderson engineering • enviro GENERAL GENERAL	17 Assonment	Pciates Lim brinfrastructure	o.2
S Plot: /	RODNE RODNE Apr. 2022, - 10:19:38 AM RODNE RODNE PR PR PR PR PR PR PR	MUNICIPALIT West E CONTRACT No. 2158 R.V. Anderson engineering • enviro GENERAL COPOSED SITE PLAN.dwg	17 Assonment	roject No: 215817	o.2

## PROPOSED SITE PLAN G103 2m 0 4m 80

2m 0 4m 8m #M200



POSED YARD PIPING	

NO	TES:		
1.	CONFIRM LOCATIO	N IS APPROXIMATE, CON TION IN FIELD.	NTRACTOR TO
2.	DURING INSTALL	O DIVERT CLARIFIER FLO ATION OF MECHANISM.	JW TO LAGOON
00	ISSUED FOR 50%	6 CLIENT REVIEW	22/04/22 AIM
No. File <sup>:</sup> R	REVISION	nin-Rodney WWTP Upgrades\10	CADdwg\01 Revit\A 000 2
S Plot: A	ite\Sheets\G104 PROPO	SED YARD PIPING.dwg	
	• •		
	~le		
	TY OF B	MUNICIPALITY	Y OF
	STATISTICS IN THE STATE	MUNICIPALITY	lain
	Type Provide P	MUNICIPALIT	lgin
	RUTY OF MER	MUNICIPALITY West E	r o⊧ Igin
	ALL THE DEFINITION OF THE PARTY	MUNICIPALITY West E	a o⊧ Igin
	TO THE REAL PROPERTY OF THE RO	MUNICIPALITY West E	ilgin
	To be the second	MUNICIPALITY West E	r o⊧ Igin
	Contraction of the second	CONTRACT No. 2158	Igin
	reference of the second s	CONTRACT No. 2158	Igin
		CONTRACT No. 2158	Igin
5		CONTRACT No. 2158	Associates Limited
5		CONTRACT No. 2158	Associates Limited ument • infrastructure
5		MUNICIPALITY         West E         CONTRACT No. 21584         R.V. Anderson         engineering • environ	Associates Limited
ζ		MUNICIPALITY         West E         CONTRACT No. 21584         R.V. Anderson         engineering • environ	Associates Limited
ζ		MUNICIPALITY West E         CONTRACT No. 21584         R.V. Anderson engineering • environ	Associates Limited
ζ		MUNICIPALITY         West E         CONTRACT No. 21584         R.V. Anderson         engineering • environ	Associates Limited
5	A COMPANY OF THE	MUNICIPALITY         West E         CONTRACT No. 21584         R.V. Anderson         engineering • environ	Associates Limited ment • infrastructure
5		MUNICIPALITY         West E         CONTRACT No. 21584         R.V. Anderson         engineering • environ	Associates Limited ment • infrastructure
5		NUNICIPALITY West E	Associates Limited ment • infrastructure
ζ		MUNICIPALITY         West E         CONTRACT No. 21584         R.V. Anderson         engineering • environ         YWPCP UPG	Associates Limited ment • infrastructure
ζ	The second secon	MUNICIPALITY         West E         CONTRACT No. 21584         R.V. Anderson         engineering • environ         YWPCP UPG	Associates Limited ment • infrastructure
5	TOR RODNE	CONTRACT No. 2158 R.V. Anderson engineering • environ	17 Associates Limited Imment • infrastructure RADES
<b></b>	The second secon	CONTRACT No. 2158 R.V. Anderson engineering • environ	Associates Limited ment • infrastructure RADES
5	The second secon	CONTRACT No. 2158 R.V. Anderson engineering • environ EY WPCP UPG GENERAL POSED YARD PIF	Associates Limited ment • infrastructure RADES
Č.	AS SHOWN	WUNICIPALITY West E CONTRACT No. 2158 R.V. Anderson engineering • environ GENERAL POSED YARD PIF	Associates Limited ment • infrastructure RADES
Scale	RODNE RODNE	CONTRACT No. 2158 R.V. Anderson engineering • environ GENERAL POSED YARD PIF	Associates Limited ment • infrastructure RADES PING RVA Project No: 215817
Scale: Date:	RODNE PRO As shown Apr-22	MUNICIPALITY   Wester   CONTRACT No. 21584	Associates Limited ment • infrastructure RADES PING RVA Project No: 215817 DWG NO.
Scale: Date: Drawn Check	RODNE PRO Apr-22 by: DG/OK ed by: DME	R.V. Anderson engineering • environ	Associates Limited ment • infrastructure RADES PING RVA Project No: 215817 DWG NO.

- BYPASS BY— BY— CHEMICAL CHE DECANT \_\_\_\_\_ DEC \_\_\_\_\_ – EFF —— WATER \_\_\_\_\_ W \_\_\_\_\_ W \_\_\_\_\_ PROCESS — P — P — \_\_\_\_\_ RAS \_\_\_\_\_ SANITARY — SAN — SAN — \_\_\_\_\_ SCU \_\_\_\_\_ ------ SLU ----------- WAS ------



UNIFLANGE	A SULVE OF MERICAN	MUNICIPALI West	ty of Elgin
GATE VALVE C/W EXTENSION			
		CONTRACT No. 215	817
DRESSER COUPLING UNIFLANGE	<b>a</b> rv	R.V. Anderso	n Associates Limited
	RODN	EY WPCP UP	GRADES
		GENERAL	
	Scale: AS SHOWN		RVA Project No:
	Date: Apr-22 Drawn by: OK	Designed by: MEH	DWG NO.
<b>U.8m</b> #M20	Checked by: DME	Approved by: AIM	G105

00 ISSUED FOR 50% CLIENT REVIEW

File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CADdwg\01 Revit\A.000.2 Site\Sheets\G105 LAGOON PLAN.dwg

No. REVISION

Plot: Apr. 2022, - 10:40:39 AM

22/04/22 AIM DATE BY

EXISTING 200Ø



NO <sup>-</sup> 1. 2. 3. 4. 5.	TES: REMOVE AND DI REMOVALS TO E SEASON (APRIL REMOVE AND DI MECHANISMS AI REMOVE AND DI REMOVE AND DI (TYP. OF 6). REMOVE AND DI	SPOSE OF TREES AROL E COMPLETED OUTSIDE 1 TO SEPTEMBER 15). SPOSE OF EXISTING CL ND FRP HOUSING ON CL SPOSE OF EXISTING 300 SPOSE OF EXISTING SU	IND CLARIFIER. TREE E OF BIRDNESTING ARIFIER ARIFIER. DOOL ALUM TANK. RFACE AERATORS REENING BUILDING.
	[		
00 No. File: R: Si	ISSUED FOR 50% REVISION 2021/215817 - West El te\R101 REMOVALS.dv	6 CLIENT REVIEW gin-Rodney WWTP Upgrades\10 vg	22/04/22 AIM DATE BY CADdwg\01 Revit\A.000.2
<u>Ρ</u> ΙΟι. <i>τ</i>	Apr. 2022, - 10.57.00 Au	MUNICIPALIT	r o⊧ Igin
	(	CONTRACT No. 2158	17
č	arva	R.V. Anderson engineering • environ	Associates Limitec
	RODNE	EY WPCP UPG	RADES
		REMOVALS	
	SI	TE PLAN REMOVA	ILS
Scale:	AS SHOWN		RVA Project No: 215817
Date:	by: DG/OK	Designed by: MEH	DWG NO.
Checke	ed by: DME	Approved by: AIM	R101



1 #1 - SURFACE AERATORS N.T.S





3 #3 - CLARIFIER FRP HOUSING N.T.S













## PIPING SYSTEMS

#### CHEMICAL/ SPECIALTY PIPING SYSTEMS

ACS	-	ACTIVATED SILICA	ALUM	-	ALUMINUM SULFATE
AI	-	INSTRUMENT AIR	APLY	-	APPLICATION POLYMER
AP	-	PROCESS AIR	CF	-	CHEMICAL FEED
BW	-	BACKWASH	CLD	-	CHLORINE DIOXIDE
CEN	-	CENTRATE	CLG	-	CHLORINE GAS
CW	-	COOLING WATER	CS	-	CHLORINE SOLUTION
DEWS	-	DEWATERED SLUDGE	CTS	-	CALCIUM THIOSULPHATE
DG	-	DIGESTER GAS	FER	-	FERRIC SULPHATE
DRN	-	PROCESS DRAIN	FLR	-	FLUORIDE
DS	-	DIGESTED SLUDGE	GAC	-	GRANULAR ACTIVATED CARBON
DSU	-	DIGESTER SUPERNATANT	HYPO	-	SODIUM HYPOCHLORITE
EW	-	EFFLUENT WATER	NABS	-	SODIUM BISULPHITE
FE	-	FINAL EFFLUENT	NAOH	-	SODIUM HYDROXIDE
FO	-	FUEL OIL	NASI	-	SODIUM SILICATE
FW	-	FLUSHING WATER	NH3	-	AMMONIA
GS	-	GRIT SLURRY	NPLY	-	NEAT POLYMER
HW	-	HOT WATER	OZN	-	OZONE
HPEW	-	HIGH PRESSURE EFFLUENT WATER	PAC	-	POWDER ACTIVATED CARBON
IWE	-	INLET WORKS EFFLUENT	PACL	-	POLYALUMINUM CHLORIDE
ML	-	MIXED LIQUOR			
NG	-	NATURAL GAS			
OF	-	OVER FLOW			
PE	-	PRIMARY EFFLUENT			
PRW	-	PROCESS WATER			
PS	-	PRIMARY SLUDGE			
PW	-	POTABLE WATER			
RAS	-	RETURN ACTIVATED SLUDGE			
RS	-	RAW SEWAGE			
SAND	-	SANITARY DRAIN			
SC	-	SCUM			
SE	-	SECONDARY EFFLUENT			
STMD	-	STORM DRAIN			
SU	-	SUPERNATANT			
TFL	-	THICKENER FILTRATE			
TWAS	-	THICKENED WASTE ACTIVATED SLUDGE			
VNT	-	VENT			
WAS	-	WASTE ACTIVATED SLUDGE			
WS	-	WASTE SLUDGE			
WW	-	WASTEWATER			

## PIPE MATERIAL

B.F

CHK'D PL

CH. OP.

C.O.

D.C

C.RED.

DISCH.

E.RED.

F.C.

F.D.

F.F.D.

H.C.

H.V.

HWL

BI	-	BLACK IRON
CI	-	CAST IRON
CPP	-	CONCRETE PRESSURE PIPE
CS	-	CARBON STEEL
CSP	-	CONCRETE SEWER PIPE
CU	-	COPPER
D.I.	-	DUCTILE IRON
DIGL	-	DUCTILE IRON GLASS LINED
FRP	-	FIBREGLAS REINFORCED PLASTIC
HDPE	-	HIGH DENSITY POLYETHYLENE
PET	-	POLYETHYLENE TUBING
PVC	-	POLYVINYL CHLORIDE
RC	-	REINFORCED CONCRETE
SS	-	STAINLESS STEEL

		VALVES	EQUIPM
ARV	-	AIR RELEASE VALVE	EXAMPL
BFP	-	BACKFLOW PREVENTER	
BFV	-	BUTTERFLY VALVE	
BLV	-	BALL VALVE	
CV	-	CHECK VALVE	(2) REPRESEN
DV	-	DUCKBILL VALVE	
GLV	-	GLOBE VALVE	PIPING
GV	-	GATE VALVE	EXAMPL
KGV	-	KNIFE GATE VALVE	
MDV	-	MUD VALVE	
MV	-	MOTORIZED VALVE	(1) REPRESEN
NDV	-	NEEDLE VALVE	(2) REPRESEN
PLV	-	PLUG VALVE	(3) PIPE MATER
PNV	-	PINCH VALVE	
PRV	-	PRESSURE RELIEF VALVE	
SOV	-	SOLENOID VALVE	
TLV	-	TELESCOPING VALVE	
TWV	-	THREE WAY VALVE	

MISC	ELLAN	EOUS	VALV	E OPERATORS
	-	BLIND FLANGE		
) PL	-	CHECKERED PLATE	М	MOTORIZED OPERATOR
P.	-	CHAIN OPERATION		
	-	CLEAN OUT		
D.	-	CONCENTRIC REDUCER	S	SOLENOID OPERATOR
	-	DRESSER COUPLING		
Н.	-	DISCHARGE		
D.	-	ECCENTRIC REDUCER	P	PNEUMATIC OPERATOR
	-	FLUSHING CONNECTION		
	-	FLOOR DRAIN		
	-	FUNNEL FLOOR DRAIN		
	-	HOSE CONNECTION		
	-	HOSE VALVE		
	-	HIGH WATER LEVEL		

L.R.	-	LONG RADIUS
NOM.	-	NOMINAL (ELEVATION)
REF.	-	REFERENCE DIMENSIONS SUBJECT TO CHANGE PENDING EQUIPMENT SECTION.
S.C.	-	SAMPLING CONNECTION
SUCT.	-	SUCTION

V.C. - VICTAULIC COUPLING

V.F. - VICTAULIC FLANGE

MENT IDENTIFICATIO

PLE : <u>PMP-401</u> (1) (2) NT EQUIPMENT NAME

ENTS EQUIPMENT NUM

## **IDENTIFICATION (TA**

PLE: <u>100</u>-WAS-<u>SS</u> (1) (2) (3) ENTS PIPE SIZE IN MILL ENTS SYSTEM ERIAL

: PMP					
.: PMP					
ł.					
TERS	L				
				22/04/22	
	00 No. File: R	REVISION	I% CLIENT REVIEW	22/04/22 DATE 10 CADdwg\01 Revit\P00	BY
	LI Plot: /	EGENDS & ABBREVIA Apr. 2022, - 10:19:53 A	ATIONS.dwg M		
		2996	MUNICIPALI West	ty of Elgin	
			CONTRACT No. 215	817	
			CONTRACT No. 215	817	
	5	ðrv	CONTRACT No. 215	817 on Associates Lin ronment • infrastructure	nited
	ζ	<b>ð</b> rv	CONTRACT No. 215	817 on Associates Lin ronment • infrastructure	nited
	5	<u>ð</u> rv	CONTRACT No. 215	817 on Associates Lin ronment • infrastructure	nited
	ζ	ðrv	CONTRACT No. 215	817 on Associates Lin ronment • infrastructure	nited
	ζ	<u>arv</u>	CONTRACT No. 215	817 on Associates Lin ronment • infrastructure	nited
	ζ	Bun	CONTRACT No. 215	817 on Associates Lin ronment • infrastructure	nited
	<b>č</b>	Brv	CONTRACT No. 215	817 on Associates Lin ronment • infrastructure	nited
	<b>č</b>	Brv	CONTRACT No. 215 <b>B</b> R.V. Anderso engineering • envir EY WPCP UPO	817 on Associates Lim ronment • infrastructure	hited
	<b>č</b>	<b>Drv</b> Rodn	CONTRACT No. 215 <b>a</b> R.V. Anderso engineering • envir EY WPCP UPC PROCESS ENDS & ABBREVI	817 on Associates Lin ronment • infrastructure GRADES	nited
	Scale		CONTRACT No. 215 <b>B</b> R.V. Anderso engineering • envir EY WPCP UPO PROCESS ENDS & ABBREVI/	817 on Associates Lim ronment • infrastructure GRADES GRADES	nited
	Scale: Draws	RODN RODN LEGE	CONTRACT No. 215 <b>B</b> <b>R.V. Anderso</b> engineering • envir EY WPCP UPO PROCESS ENDS & ABBREVI/	817 on Associates Limponment • infrastructure GRADES ATIONS RVA Project No: 215817 DWG NO.	nited







 220
219
218
217
216
215
214
213
210
212
 210
 209
208
207
206
205
204
203
200
202
 201

OUTFAL



							Ó	
00	ISSUED	FOR 50%	6 CLIENT	REVIEW			22/04/22	AIM
00 No. File: R: Sc Plot: A	ISSUED REVISIC 2021\2158 chematics\S Apr. 2022, - 1	FOR 50% DN 17 - West El heets\P001 10:19:59 AM	6 CLIENT gin-Rodney \ PROCESS F	REVIEW WWTP Upgra	ades\10 RAM.dwg	CADdw	22/04/22 DATE g\01 Revit\A.00	AIM BY 0.3
00 No. File: R: So Plot: A	ISSUED REVISIO	FOR 50% DN 17 - West El heets\P001 10:19:59 AM	6 CLIENT	REVIEW	ades\10 RAM.dwg ALIT t E	CADdw Y OI	22/04/22 DATE g\01 Revit\A.00	AIM BY 0.3
00 No. File: R: So Plot: A	ISSUED REVISIO	FOR 50% DN 17 - West El heets\P001 10:19:59 AM	6 CLIENT	REVIEW	ades\10 RAM.dwg ALITY <b>t E</b> 2158	CADdw g Y OI EIG	22/04/22 DATE g\01 Revit\A.00	AIM BY 0.3
00 No. File: R: Sc Plot: A	ISSUED REVISIO	FOR 509 DN 17 - West El heets\P001 10:19:59 AIV		REVIEW	ades\10 RAM.dwg ALITY t E 2158 <sup>-</sup> erson	CADdw Y OI Ig 17 17 Asso	22/04/22 DATE g\01 Revit\A.00	AIM BY 0.3
00 No. File: R: So Plot: A	ISSUED REVISIO	FOR 50% DN 17 - West El heets\P001 10:19:59 AW		REVIEW	ades\10 RAM.dwg ALITY t E 2158 2158	CADdw OI Ig	22/04/22 DATE g\01 Revit\A.00	AIM BY 0.3
00 No. File: R: Sc Plot: A	ISSUED REVISIO	FOR 509 DN 17 - West El heets\P001 10:19:59 AW		REVIEW	ades\10 RAM.dwg ALITY t E 2158 2158 2158 Cerson	CADdw CA	22/04/22 DATE g\01 Revit\A.00	AIM BY 0.3
00 No. File: R: Sc Plot: A	ISSUED REVISIO	FOR 50% DN 17 - West El heets\P001 10:19:59 AW		REVIEW	ades\10 RAM.dwg 2158 2158 erson enviror	CADdw CADdw	22/04/22 DATE g\01 Revit\A.00	AIM BY 0.3
00 No. File: R: Sc Plot: A	ISSUED REVISIO	FOR 50% DN 17 - West El heets\P001 10:19:59 AW		REVIEW	ades\10 RAM.dwg 2158 2158 erson enviror	CADdw G CADdw CADdw G CADdw G CADdw CA	22/04/22 DATE g\01 Revit\A.00	AIM BY 0.3
00 No. File: R: Sc Plot: A	ISSUED REVISIO (2021/2158) chematics/S (2021/2158) chematics/S (2021/2158) chematics/S (2021/2158) (20	FOR 50% DN 17 - West El heets\P001 10:19:59 AW Total: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		REVIEW	ades\10 RAM.dwg 2158 2158 erson Penviror	CADdw CADdw	22/04/22 DATE g\01 Revit\A.00	AIM BY 0.3
00 No. File: R: Sc Plot: A Scale: Date: Drawn Checke	ISSUED REVISIO (2021/2158) chematics/S (pr. 2022, - 1) () () () () () () () () () () () () ()	FOR 50% DN 17 - West El heets\P001 10:19:59 AW FOR 50% DONE CONNE OWN OK E		REVIEW WWTP Upgra- LOW DIAGE NICIPA SCT No. ACT No. N. Anden ACT No. PCP L PCP L PCP L PCP L PCP L	ades\10 RAM.dwg 2158 2158 erson Penviror		22/04/22 DATE g\01 Revit\A.00 Fin Ciates Lim ciates Lim infrastructure DES	AIM BY 0.3



















#### Staff Report

Report To:	Council Meeting
From:	Magda Badura, CAO/Treasurer
Date:	2022-06-23
Subject:	HR-1.6 Mileage Policy

#### Recommendation:

That West Elgin Council hereby receives the report from Magda Badura, CAO/Treasurer re; HR-1.6 Mileage policy;

AND THAT West Elgin Council hereby approves the amended HR-1.6 Mileage Policy;

AND THAT West Elgin Council approve the 2022 CRA recommended mileage rate of \$0.61 per kilometer effective July 1, 2022.

#### Purpose:

The purpose of this report is to bring the current mileage rate for the Municipality in line with the 2022 CRA recommended mileage rate and update the policy and by-laws as needed for this to take effect on July 1, 2022

#### Background:

Current HR-1.6 Mileage policy states that the rate is to be set by resolution of Council; Council and staff have not amended the mileage since 2010. This is because historically, municipality's mileage rate was consistent with vast majority of municipalities in Elgin County.

The 2021 CRA recommended mileage reimbursement rate was \$0.59/km and increased to \$0.61/km for 2022. Every December, CRA posts the recommended mileage rate for the following year; with separate rates for the first 5000 kilometers claimed, and for kilometers beyond 5000 incurred in a given calendar year.

In order to ensure mileage reimbursement rates remain in line with the associated costs of driving and maintaining a personal vehicle, it is recommended that the amended policy include an annual adjustment based on what is posted by CRA in December each year, and to be communicated to and approved by Council during annual Fees and Charges deliberations.

#### **Financial Implications:**

We have reviewed mileage paid during 2018-2021 and 2022 YTD, it appears a \$0.11 per km increase will result in a total annual cost increase of approximately \$3,000 - \$4,000; although its impossible to know the exact impact as mileage claims are variable. Mileage reimbursement since 2020 have decreased significantly due to COVID and staff utilizing municipal vehicles.

#### Policies/Legislation:

HR-1.6 Mileage Policy By-Law 2021-69 Fees and Charges

#### **Report Approval Details**

Document Title:	HR-1.6 - Mileage Policy - 2022-23-Administration Finance.docx
Attachments:	<ul> <li>HR-1.6 Mileage - June 23, 2022.docx</li> <li>By-Law 2022-42- Amend Fees and Charges LTVCA and Mileage.docx</li> <li>By-law 2022-42 Amend Fees and Charges for LTVCA Fees Schedule.pdf</li> </ul>
Final Approval Date:	Jun 22, 2022

This report and all of its attachments were approved and signed as outlined below:

Jana Nethercott

MUNICIPALITY OF WEST ELGIN POLICY MANUAL				
Chapter:	Human Resources	Index No.	HR-1.6	
Section:	Benefits	Effective Date:	Feb 17/98	
Subject:	Mileage	Revision Date:	Sept 9/10	
		Page:	1 of 1	

#### 1 PURPOSE:

1.01 To establish a mileage rate for ALL employees.

#### 2 POLICY:

2.01 All employees will be paid mileage when using their own vehicle for conducting business of the municipality. The rate is to be set by resolution of Council The CRA recommended rate and added to the Fees and Charges By-law Annually.

#### 3 **ADMINISTRATION:**

3.01 The Treasurer shall follow this policy in processing requests for payment.

#### 4 **ATTACHMENTS**:

4.01 None

Council authorization: By-law 98-06

By-law 2003-67 By-law 2004-05 By-law 2007-47 By-law 2010-71



## The Corporation Of The Municipality Of West Elgin

## By-Law No. 2022-42

## Being a By-Law to Amend By-Law 2021-69 to Provide for Various Fees and Charges for the Municipality of West Elgin for 2022

**Whereas** Section 5(3) of the *Municipal Act, 2001, S.O. 2001, c.25,* as amended, provides that a municipal power shall be exercised by by-law; and

**Whereas** Section 10(1) of the *Municipal Act*, provides that a municipality may provide any service or thing that municipality considers necessary or desirable for the public; and

**Whereas** Section 10(2) of the *Municipal Act*, provides that a municipality may pass bylaws respecting: in paragraph 7, Services and things that the municipality is authorized to provide under subsection (1); and

**Whereas** Section 391(1) of the *Municipal Act*, provides that a municipality may impose fees or charges on persons:

- (a) for services and activities provided or done by or on behalf of it;
- (b) for costs payable by it for services and activities provided or done by or on behalf of any other municipality or any local board; and
- (c) for the use of its property including property under its control; and

**Whereas** it is deemed expedient to amend By-Law 2021-69, being a by-law to provide for the fees and charges for the Municipality of West Elgin, passed on December 16, 2021;

Now therefore the Council of the Municipality of West Elgin enacts as follows:

- 1. That Schedule is hereby added as Schedule B Lower Thames Valley Conservation Authority, in the form of Schedule 3 as attached to this by-law.
- 2. That Schedule A, Administration is hereby amended by changing the Mileage fee to \$0.61.
- 3. That this by-law shall come into force and effect on the day that it is passed.

270

Read a first, second, and third time and finally passed this 23<sup>rd</sup> day of June, 2022.

#### **SCHEDULE 3**

#### LTVCA Planning Fee Schedule

#### Board Approved: April 21, 2022

Plan Review Fee Schedule	New LTVCA Planning Fee Schedule
legal / private / realtor inquiries	\$125.00
<ul> <li>clearance letters for subdivision/condominium approval (applies to each phase of subd. requested) (from draft plan to clearance, including SWM review) (where permit fee not required)</li> <li>\$115/lot (max \$10,000 per phase) detailed SWM Review and all other review (outside of regulated area)</li> <li>\$350/lot detailed SWM Review and all other review (within regulated area with each lot receiving a permit) (current fee)</li> </ul>	<ul> <li>a. \$115/lot (max \$10,000 per phase) (outside of regulated area)</li> <li>b. \$350/lot (within regulated area)</li> <li>c. \$1,200 preliminary SWM review</li> </ul>
major OP/ZBLA industrial, commercial, institutional, subdivision, etc.	\$300.00 (no SWM review required)
minor OP/ZBLA single family residence	\$200.00
consent	\$200.00
minor variance	\$115.00
site plan control / approval	\$200.00
OPA / ZBLA combination	\$275.00
consent / minor variance with ZBLA combination	\$250.00
consent with minor variance combination	\$250.00
multiple consent applications on a single application	\$115.00/lot (unregulated) \$350.00/lot (regulated)
input and review of relevant EIS's / EA's and other major studies, proponent driven	\$1,500.00
LTVCA staff appearing as an expert witness at a Committee of Adjustment hearing or Ontario Land Tribunal hearing: a. Acting on behalf of the Municipality b. At the request of the proponent	a. no fee charged

#### <u>Rodney Aldborough Agriculture Society</u> <u>Board of Director's Meeting Minutes</u> <u>May 26, 2022</u>

Prize book:

- Last time we had 2000. This was about the right amount, and we didn't have too many left at the end of the year.
- Front Cover- Dan has it and will send to Janet
- Junior fair and school fair stuff has to be sent to the
- Night market- lets avoid this for now because we have enough locally already happening and we don't want to step on anyones toes
- Has anyone contacted Tiny Tots? we should make sure they have a discussion with them Cynthia will contact Shelly about the normal outside play area for tots.

#### Schedule for Fair Weekend

Friday 4-close Midway by Cope 6 pm Ambassadors meet at fair office 7-9 Official Opening and ambassador competition

Saturday 9:30 - Gates Open 10 - close - midway 10 - 4 pm Scavenger Hunt 11 am parade (lineup at 10am) 12 - 5 Dotsy the Clown 12:00 Team Penning 3:00 Farm Olympics 4:00 Bike Draw from Scavenger hunt 6:00 Tractor Pull and Beer Garden

Sunday 11:00 - close - Midway 9:30 Church Service 9:30 Kids Fun Run -Outside Rec Centre 10:00 Adult Road Race - Outside Rec Centre 11:00 Team Penning- infield 11:00 Cattle Show- cattle shelter 12:30 Baby Show- Rec Centre 2:00 Demolition Derby and Beer Garden 4:00 Fire Department Extrication Demo 4:00 pickup in the hall Admission: Friday \$5.00 each Saturdav Adults \$15.00 12-17 years \$5.00 Under 12 free Sunday Adults \$10

12-17 years \$5.00

Weekend Passes available in advance only for \$25.00 Margs Variety, Rodney Market

Presidents Message- Dan will do the message Ambassador Message- Tori already gave it to us

Drop off: 2:00 - 9:00 pm Thursday Class 8- see class for drop off and pickup times. Pick up: 4:00 pm on Sunday

Demo Derby- change times and a few minor details. NO vehicles to be left. They must be removed from the premises by 8:00 pm.

Letter from Janet- Resignation as treasurer following the September fall fair. She will do the end of the fair and will continue to finish the end of the grant process for this year but will not do the 2023 grants for next year. The new treasurer will need to be in place by November as the grants are required to be sent in during the month of November.

• Would like to stay on as an associate director which the board agreed we would love to have Janet continue with the fair board.

Photography class will require a new superintendent after this year as Marguerite Alderton will be resigning after the 2022 fair.

Car Show is on June 17th 2022 - we need some volunteers to sit at the registration table, sell 50/50 tickets, etc.

Chicken Drive Thru Dinner - will do a drive thru chicken dinner on a weeknight: pickup 5:30 to 7:00 possibly. This will be early August.

Wallacetown fair has our third tent. On Canada Day- Municipality has asked for the tents.

Meeting Adjournment: 9:05 pm



## **Municipality of West Elgin**

## **Minutes**

## **Recreation Committee**

#### May 18, 2022, 7:00 p.m. West Elgin Community Complex - Hybrid Meeting 160 Main Street West Lorne Electronic Hybrid Meeting

Present: K. Neil, Chair Councillor A. Cammaert Councillor T. Tellier Nicole Campbell Cindy da Costa Megan Bartlett

Regrets: Destiny Vickers

Staff Present: Emily Jocius

1. Call to Order

Chair Ken Neil called the meeting to order at 7:18p.m.

#### 2. Adoption of Agenda

**Moved:** Cindy da Costa **Seconded:** Councillor Tellier

That West Elgin Recreation Committee hereby adopts the agenda as circulated.

Carried

3. Disclosure of Pecuniary Interest

No disclosures

#### 4. Minutes

**Moved:** Councillor Tellier **Seconded:** Cindy da Costa

That the West Elgin Recreation Committee adopts the minutes of April 20, 2022 as printed and circulated.

Carried

#### 5. Business Arising from Minutes

No business arising from the minutes.

#### 6. Staff Reports

#### 6.1 Canada Day Update 2022

Emily Jocius, Operations and Community Services Coordinators gave the committee an update on current plans for Canada day.

The West Lorne Optimist and Rodney Lions food truck confirmed their attendance for the event. Staff are working on securing craft supplies and picnic games for the event.

Councilor Cammaert brought forth an inquiry from a parent on West Lorne Minor Hockey. The board further discussed that youth sports and organizations should be show cased at a separate event as tying it into Canada Day would take away from the recognition that the sports clubs and organizations deserve.

**Moved:** Councillor Cammaert **Seconded:** Cindy da Costa

That West Elgin Recreation Committee hereby receives the report from Emily Jocius, Operations and Community Services Coordinator for information.

Councilor Cammaert made a motion to support and recognize youth sports and organizations in the community as a separate event.

#### Carried

#### 6.2 Mental Health Resource Week Recap

E.Jocius provided the committee with an update on the Mental Health Resource week. The committee liked the suggestion made by staff to condense the event and make it one large show case.

That West Elgin Recreation Committee received the report from Emily Jocius, Operations and Community Services Coordinator for information purposes.

#### 6.3 Operational Update

E. Jocius, provided the committee with an update on current recreational opportunities in the community. Staff proposed a sponsored lawn bowling night and the committee directed staff to come back with additional information on the sponsored night.

Moved: Councillor Tellier Seconded: Councillor Cammaert

That West Elgin Recreation Committee hereby receives the report from Emily Jocius, Operations and Community Services Coordinator.

The West Elgin Recreation Committee hereby direct staff to bring additional information forth to the next committee meeting.

#### Carried

#### 6.4 Recreational Inquires

E, Jocius provided the committee with recreational inquiries from the community. The committee directed staff to move forward with programming as scheduled and include the mile markers and other large items in the 2023 budget. The committee also directed staff to move forward with planning a roller skating night for the 2022 recreational calendar. Staff is to report back with the event.

That West Elgin Recreation Committee received the report from Emily Jocius, Operations and Community Services Coordinator for information purposes.

#### 7. Adjournment

**Moved:** Cindy da Costa **Seconded:** Councillor Tellier

That West Elgin Recreation Committee hereby adjourn at 8:27 p.m. to meet again on June 15, 2022 at 7:00 p.m.

Carried

Ken Neil, Chair

Emily Jocius, Recording Secretary



## Municipality of West Elgin Recreation Committee

22413 Hoskins Line, Rodney Ontario NOL 2C0

June 16, 2022

Mayor and Council, Municipality of West Elgin

At the June 15, 2022 West Elgin Recreation Committee Meeting, the Committee passed a resolution requesting West Elgin Council consider providing a Council Grant for Youth Lawn Bowling Nights on June 23, July 7, and July 14, 2022.

The Municipality of West Elgin Recreation Committee is hereby requesting a Council Grant in the amount of \$75.00, in order to provide a donation to the West Lorne Lawn Bowling Club for maintenance of greens.

Sincerely,

Emily Joćius Recording Secretary Municipality of West Elgin Recreation Committee.



## **Elgin County Council Highlights**



### Transportation Master Plan - Road Rationalization

The County is currently developing its first comprehensive Transportation Master Plan (TMP). The TMP is a multi-phase study that will outline the policy directions and identify transportation infrastructure plans to meet the needs of the County's residents, businesses, and visitors through 2065. The TMP is now nearing the completion of Phase 2: Develop and Assess Network Alternatives and a second Public Information Centre to gain public feedback is scheduled for later this summer. A report was presented to County Council that provided progress to date and specifically addressed the study's development of identifying which roads should comprise the County's transportation network (road rationalization).

- Transportation Master Plan Road Rationalization
- Fixing Long-Term Care Act
- 2022 Council Action Plan & Staff
   Operational Plan
- Highwheel Way Cycling Route -Aylmer to Port Bruce



Road use and function can change over time and road transfers between the County and its Local Municipal Partners have occurred throughout the history of Elgin County in order to best accommodate growth and demand changes.



Council directed staff to immediately advance the **County Road Rationalization** Study and meet with Local Municipal Partner staff and Mayors to discuss written feedback provided by Local Municipal Partners, examine draft Road Rationalization Study recommendations as prepared by IBI Group, and discuss jurisdictional impacts and concerns. Feedback received from Local Municipal Partners will be used to inform an Implementation Action Plan and / or Asset Transfer Protocol for consideration by the Elgin County Budget Committee and Elgin County Council in 2022.

The complete report regarding County of Elgin Road and Bridge Rationalization is included in the June 14, 2022 County Council Agenda Package.

### Fixing Long-Term Care Act

Council received a report that provided an overview of the new Fixing Long-Term Care Act, 2021 and Phase 1 of Regulations under the Act. The report highlighted changes and implementation status regarding the following items: Residents' Bill of Rights; Screening Measures for Staff, Volunteers and County Councillors; Quality; Enforcement; Increased Staffing: Four Hours of Direct Care; Emergency Planning; Medical Directors; Infection Prevention and Control; and, Resident Experience: Air Conditioning.

280



### 2022 Council Action Plan and Staff Operational Plan

Council approved its 2022 Action Plan which identifies key priorities for County Council, along with expected results, strategies, plans and initiatives that Council will deliver on to ensure exceptional service to the community. The actions contained in this plan link back to the strategic priorities set out in the 2020 – 2022 Council Strategic Plan.

In 2020, Council established performance measures to ensure the services and actions defined as part of the strategic planning process meet the needs of Elgin County residents. These performance measures help Council maintain focus on the quality of services and the benefits of those services to the community.

Challenging years lie ahead for Elgin County as it joins the rest of the country in recovering from the COVID-19 pandemic; however, Council remains committed to positioning itself to thrive in the long-term despite these difficulties.



A staff operational plan, with actions tied to the strategic objectives of Council was also approved by Council on June 14, 2022.

The <u>2022 Council Action and Staff Operational Plan</u> can be reviewed as part of the June 14, 2022 County Council Agenda Package.

## County to Launch Highwheel Way Cycling Route from Aylmer to Port Bruce

The County of Elgin will hold a ribbon cutting ceremony to celebrate the official launch of the Highwheel Way Cycling Route and the unveiling of the Doolittle Mural on June 28, 2022 at the Port Bruce Pavilion at 1:30p.m. This event coincides with Ontario Bike Month, a month dedicated by the Province to demonstrate the importance of cycling for maintaining healthy lifestyles, reducing traffic congestion, and increasing economic development through cycle tourism.

281



Cycling has become an ever-popular form of transportation within the County of Elgin for residents and visitors alike. When the County's Engineering Department created a cycle route on Imperial Road (Highway 73), from the Town of Aylmer to the village of Port Bruce, staff from the County's Economic Development and Tourism department leaped at the opportunity to brand this route. Drawing upon knowledge from other County departments, as well as politicians from the Town of Aylmer and the Township of Malahide, the name Highwheel Way: from Pedal to Paddle was formed. This name celebrates Elgin's cycling history through not only a branded bike route but also on a mural that honours a historic local cyclist, Mr. Doolittle.

Perry Doolittle, born on March 22, 1861, near Luton, a few miles north of Port Bruce, is thought to be the first person to have built and ridden a bicycle in the County. In the mid-1870s, Mr. Doolittle sought the expertise of a local blacksmith to help him build a high wheel bicycle, later became a competitive racer, and was part of a group that founded the Canada Wheelman's Association in St. Thomas.

Through funding received from the Estate of Donna Vera Evans Bushell, as a bequest to the Elgin County Museum, murals on the walls of the washroom building at Wannacott Park in Port Bruce now illustrate Mr. Doolittle on his high wheel bicycle and denote the beginning and end of the Highwheel Way cycle route. This mural was painted by an extraordinary local artist, Candy McManiman, a retired art teacher from the area.

"It's projects like these that bring together several departments, and history, to create something wonderful for all to enjoy for many years to come," said Mary French, Elgin County Warden. "Cycle tourism is an important component of Elgin's local economy. With several attractions and local businesses along this route, cyclists can immerse themselves in Elgin's rich culture and exceptional cuisine, all while exploring some of the most stunning views that Southwestern Ontario has to offer."

Members of the public are invited to attend the ribbon cutting ceremony:

What: Launch Event: Highwheel Way Cycle Route & Doolittle Mural When: Tuesday, June 28, 2022 Where: Port Bruce Pavilion Time: 1:30 pm

4

For the complete June 14, 2022 County Council Agenda Package please visit the Elgin County <u>website</u>.



Jun 13, 2022

#### **Municipal Councils of Ontario**

#### Subject: The Retention of Professional Engineers at Ontario Municipalities

The purpose of this letter is to stress the importance that municipal engineers play in the successful operation of cities, counties, towns, and townships across Ontario.

The Municipal Engineers Association (MEA) is a non-profit association representing the municipal engineering field in Ontario. We have a membership base of over 1,000 municipal engineers across Ontario who are employed as professional engineers at Ontario municipalities and other provincial agencies serving in the engineering/public works field.

We advocate for sustainable municipal infrastructure practices and our members provide significant input into the development of processes, standards, and specifications for use in municipal infrastructure systems such as drinking water delivery, wastewater collection and treatment, storm water management, waste management and transportation systems.

The MEA has been the proponent for the *Municipal Class Environmental Assessment* process since the mid-1980s. We are also a co-proponent of *Ontario Provincial Standards & Specifications* that many Ontario municipalities use when planning for and tendering municipal engineering projects.

There are a number of examples in various current legislation, where the use of a professional engineer is referenced. Key tasks include roles in transportation, natural resources, health and safety, consumer services, environment, tourism, agriculture, climate change, and energy. It is essential that municipalities consider the appointment of professional engineers, especially within the areas of engineering and public works, to afford municipal councils the appropriate due diligence toward public safety. Unfortunately, we are observing a concerning trend where this is no longer the case.

Professional engineers, through education and practical experience requirements, have the knowledge and foresight to not only understand the 'how' of an issue, but also understand the 'why' behind issues as well. Professional engineers are <u>licensed</u> to practice in Ontario through the *Professional Engineers Act* and are bound by statutory accountabilities, which includes a code of ethics. Under this code, professional engineers are required to act at all times with fidelity to public needs; professional engineers regard their duty to public welfare and safety as paramount.

Professional engineers also provide significant value to municipalities through their understanding of risk management, which assists in lowering exposure to claims against a municipality. With insurance premiums rising every year, it is prudent that municipalities appoint a professional engineer to guide these decision-making processes.



As of December 31, 2019, there were 57,134 practicing professional engineers licensed and practicing in the Province of Ontario. Of this number, only 136 professional engineers work for municipalities with a population of 50,000 or less. This represents only 0.2% of licensed and practicing Ontario Professional Engineers being employed by Ontario municipalities serving populations of less than 50,000. Many of these smaller municipalities have a Public Works/Engineering Department head and would benefit by appointing a Professional Engineer.

The vast majority of professional engineers working at Ontario municipalities are employed by larger urban centres having a population greater than 50,000.

For smaller municipalities that do not have the financial resources to employ a full-time professional engineer on their staff, the MEA recommends the appointment of a professional engineer through a licensed consulting firm so that your municipality may meet the needs only a professional engineer can provide.

We would also like to take this opportunity to promote membership in the MEA. There are Ontario municipalities that currently do not have representation in the MEA. If you have a professional engineer(s) on staff and they are not MEA members, we encourage your municipality to have them apply. The MEA offers members access to knowledge, learning and the ability to stay up to date with current industry practices. It truly is great value for a very nominal fee.

On behalf of the MEA, we thank you for taking time to review this letter. Should you have any questions, please reach out to the MEA's Executive Director, Dan Cozzi, P. Eng. at <u>dan.cozzi@municipalengineers.on.ca</u>.

Yours sincerely,

Jason Cole, P. Eng., MEA President 2021 - 2022





June 15, 2022

Sent via email: premier@ontario.ca

Honourable Doug Ford Premier of Ontario Legislative Building Queen's Park Toronto ON M7A 1A1

Dear Premier Ford:

## Re: Summary and Implications of Provincial Bill 109: More Homes for Everyone Act, 2022

For your information and records, at its electronic meeting held on June 7, 2022 the Council of the Town of East Gwillimbury enacted as follows:

WHEREAS the Town of East Gwillimbury is Canada's fastest growing municipality (with more than 5,000 residents) according to 2021 Census Canada data; and

WHEREAS the Council of the Town of East Gwillimbury has significant concerns regarding the impact of Bill 109 on the community planning process, and the ability of municipalities to deliver on initiatives to address housing supply and attainability, and

WHEREAS the refund provisions in Bill 109 will result in existing taxpayers subsidizing development applications as well as lost revenue and increased staff costs for municipalities; and

WHEREAS the prescription of what constitutes a complete application does not address differing levels of complexities and the unique circumstances and diverse landforms that exist across the province, nor does it recognize the collaborative process and relationships between parties that deliver results for municipalities; and

WHEREAS limiting conditions on Draft Plan of Subdivision does not address the unusual and often challenging circumstances best understood by local municipal staff and elected officials;

**Corporate Services** 



Tara Lajevardi, Hon.B.A. Municipal Clerk/Director of Legislative Services 905-478-4282 ext. 3821 tlajevardi@eastgwillimbury.ca

BE IT THEREFORE RESOLVED THAT the Council of the Town of East Gwillimbury requests that Government of Ontario revisit the provisions of Bill 109 and work with all stakeholders, including municipalities represented by the Association of Municipalities of Ontario to deliver legislation that allows municipalities to plan, grow and deliver communities that adhere to local, provincially-approved Official Plans, rather than strict statutory timelines; and

THAT a copy of this Motion be sent to the Honourable Doug Ford, Premier of Ontario, MPP Caroline Mulroney, the Minister of Municipal Affairs and Housing, all York Region Mayors and Regional Chairs in Ontario; and

THAT a copy of this Motion be sent to the Association of Municipalities of Ontario (AMO) and all Ontario municipalities for their consideration.

If you have any further questions, feel free to contact the undersigned.

Yours truly,

Ameriqueroic C.

Tara Lajevardi, Hon.B.A. Municipal Clerk

cc: The Honourable Steve Clark, Minister of Municipal Affairs and Housing The Honourable Caroline Mulroney, MPP York – Simcoe York Region Mayors and Regional Chairs Association of Municipalities Ontario All Ontario municipalities

2	C
5	C

## ST. ELIJAH ORTHODOX CHURCH 9354 GRAHAM RD., WEST LORNE, ONTARIO, NOL 2PO CANADA

JUNE 17 2022

To whom it may concern? This is a formal notification about the festivities at STI ELIJAH ORTHODOX CHURCH IN Eagle ONT., which has been approved by the MUNICIPALITY OF WEST ELGIN

On Sunday July 31 2022 we are holding a special event commemorating the Patron Saint (church service) followed by a celebration picnic, involving a luncheon from 12PM and music to 6 P.M. During the picnic, alcoholic beverages will be available. ESTIMATED ATTENDENCE 125 If you any questions call meat 519 851 6619

Sincerely, aby Perovich. ALEX PEROVICH TREASURER 24249 MARSH LINE WESTLORNE ON NOL 2PO


May 31/2022

To the municipality ab West Elgin My none is Myles Rawlek a resident of West Lorne for Bayeans and roluntay firefrighter for 5's years. I have been damy the public friends display for West Lorne and Port Glosyaw for 8 years. The reason for This letter is that on April 27/2022 my wibe passedancy from concer for hours she would like one to do a brevork display "The celebration of life. I have my pyro licene and insurance The location is 116 Angelo Dr. West Lorne an open field behinde my have of of Marsh I got the owners permission. There will be 2 dates July 3/2022 + Aug20/2022 Any questions please call 519- 859- 5922.

Respectfulls Myle Rauluk



## The Corporation Of The Municipality Of West Elgin

## By-Law 2022-40

### A By-Law to set the Transition Ratios and to Levy Taxes for the Year 2022

**Whereas** pursuant to Section 308 of the *Municipal Act, S.O. 2001, c.25*, as amended, Council of the Municipality of West Elgin deems it necessary to establish transition tax ratios for 2022; and

**Whereas** the transition tax ratios establish the relative amount of taxation to be borne by each property class; and

**Whereas** the property classes have been prescribed by the Minister of Finance under the *Assessment Act, R.S.O. 1990, c. A.31*, as amended and Regulations there to; and

**Whereas** it is necessary for the Council of the Municipality of West Elgin, pursuant to the *Municipal Act* to levy on the whole ratable property according to the last revised assessment roll for the Municipality of West Elgin the sums set forth for various purposes in Schedule "B" hereto <u>attached</u> for the current year; and

**Whereas** pursuant to By-law Number 22-15 passed by the County of Elgin to adopt estimates of all sums required by the County of Elgin for the purposes of the County Corporation and to provide a levy on area municipalities; and

**Whereas** pursuant to By-law Number 22-15 passed by the County of Elgin to establish tax ratios and set out a method by which the portion of County levies that will be raised in each area municipality; and

Whereas an interim levy was made before the adoption of the estimates for the current year;

Now Therefore the Council of the Municipality of West Elgin enacts as follows:

- 1. For the taxation year 2022, the transition tax ratio as established in By-law 22-15 of the County of Elgin for property in the following classes as outlined below:
  - a) the Residential/Farm class is 1.0000;
  - b) the Multi-Residential class is 1.9999;
  - c) the New Multi-Residential class is 1.0000;

- d) the Commercial Occupied class is 1.6376;
- e) the Commercial Excess Land class is 1.6376;
- f) the Commercial Vacant Land class is 1.6376;
- g) the Commercial Small Value Added Farm is 0.4094;
- h) the Industrial Occupied class is 2.2251;
- i) the Industrial Excess Land class is 2.2251;
- j) the Industrial Vacant Land class is 2.2251;
- k) the Industrial Small Value Added Farm is 0.5563;
- I) the Large Industrial Occupied class is 2.8318;
- m) the Large-Industrial-Vacant class is 2.8318;
- n) the pipelines class is 1.1446
- o) the farmlands class is 0.23000
- p) the farmlands awaiting development is 0.50000;
- q) the managed forests class is 0.25000
- r) the farmland awaiting development residential class is 0.5000
- s) the Landfill class is 33.402646
- 2. For the year 2022 the Municipality of West Elgin shall levy upon the Residential Assessment, Multi-Residential Assessment, Commercial Assessment including New Construction, Industrial Assessment including New Construction, Large Industrial Assessment including New Construction, Pipeline Assessment, Farmland Assessment and Managed Forest Assessment the rates of taxation per current value assessment for general purposes as set out in Schedule "A" <u>attached</u> to this By-law.
- 3. That the 2022 Municipality of West Elgin Budget <u>attached</u> as Schedule "B" and "C" inclusive was adopted by By-law 2022-13 on March 24<sup>th</sup>, 2022.
- 4. The levy provided for in Schedule "B" and "C" inclusive <u>attached</u> to this By-law shall be reduced by the amount of the interim levy for 2022.
- 5. For payments-in-lieu of taxes due to the Municipality of West Elgin, the actual amount due to the Municipality of West Elgin shall be based on the assessment roll and the tax rates for the year 2022.
- 6. For the railway rights of way and highway rights of way taxes due to the Municipality of West Elgin in accordance with the Regulations as established by the Minister of Finance, pursuant to the *Municipal Act, R.S.O. 1990*, ch M.45, as amended, the actual amount due to the Municipality of West Elgin shall be based on the assessment roll and the tax rates for the year 2022.
- 7. That the Tax Collector is hereby authorized to mail or cause to be mailed the notice of taxes due to the address of the residence or place of business of the person to whom such notice is required to be given.
- 8. That the taxes will be payable in two instalments, due September 30<sup>th</sup>, 2022 and November 30<sup>th</sup>, 2022.
- 9. That taxes may be paid at The Royal Bank of Canada Rodney, Ontario, Bank of Montreal West Lorne, Ontario, the West Elgin Municipal Office, 22413 Hoskins

Line, Rodney, Ontario, by telephone or internet banking or through the Municipality's PAP program.

- 10. That the Collector and Treasurer are hereby authorized to accept part payment from time to time on account of any taxes due.
- 11. That the penalty charge for non-payment of current taxes shall be in accordance with By-law No. 2003-06.
- 12. That this by-law shall come into force and effect upon the date of the final passing thereof and may be cited as the "2022 Tax Ratios".
- 13. If any section or portion of this By-law or of Schedule "A", "B", "C" is found by a court of competent jurisdiction to be invalid, it is the intent of the Council for the Municipality of West Elgin that all remaining sections and portions of this By-law and of Schedule "A", "B", "C" continue in force and effect.

Read a first, second, and third time and finally passed this 23<sup>rd</sup> day of June, 2022.

Duncan McPhail Mayor Jana Nethercott Clerk

#### SCHEDULE "A" TO BY-LAW 2022-xx

SUMMARY OF ALL RATES - 2022	TOTAL CVA		ELGIN	EDUCATION	TOTAL					
	\$	TAX KATES	TAX RATES	TAX RATES	TAX KATES	\$	\$	\$	\$	\$
Commercial Taxable - full	17,494,098	0.01007360	0.01023397	0.00880000	0.029108	509,210.68	176,228.55	179,034.07	153,948.06	509,210.68
Commercial Taxable - excess land	39,116	0.01007360	0.01023397	0.00880000	0.029108	1,138.57	394.04	400.31	344.22	1,138.57
Commercial Taxable - vacant land	531,100	0.01007360	0.01023397	0.00880000	0.029108	15,459.03	5,350.09	5,435.26	4,673.68	15,459.03
New construction Commercial full	4,959,432	0.01007360	0.01023397	0.00880000	0.029108	144,357.01	49,959.33	50,754.68	43,643.00	144,357.01
New construction Commercial excess land	47,400	0.01007360	0.01023397	0.00880000	0.029108	1,379.70	477.49	485.09	417.12	1,379.70
Farmlands taxable - full	486,660,817	0.00141480	0.00143736	0.00038250	0.003235	1,574,182.28	688,527.72	699,506.79	186,147.76	1,574,182.28
Farmland awaiting development - res	-	0.00615140	0.00312469	0.00038250	0.009659	-	-	-	-	-
Industrial Taxable - full	2,929,100	0.01368750	0.01390547	0.00880000	0.036393	106,598.65	40,092.06	40,730.51	25,776.08	106,598.65
Industrial taxable - excess land	59,500	0.01368750	0.01390547	0.00880000	0.036393	2,165.38	814.41	827.38	523.60	2,165.38
Industrial Taxable - vacant land	506,700	0.01368750	0.01390547	0.00880000	0.036393	18,440.32	6,935.46	7,045.90	4,458.96	18,440.32
New construction Industrial full	884,500	0.01368750	0.01390547	0.00880000	0.036393	32,189.58	12,106.59	12,299.39	7,783.60	32,189.58
New construction Industrial excess land	-	0.01368750	0.01390547	0.00880000	0.036393	-	-	-	-	-
Industrial Large - full	1,380,000	0.01741960	0.01769697	0.00880000	0.043917	60,604.87	24,039.05	24,421.82	12,144.00	60,604.87
Industrial Large - full new const	5,289,400	0.01741960	0.01769697	0.00880000	0.043917	232,292.31	92,139.23	93,606.35	46,546.72	232,292.31
Multi Res Taxable	5,908,468	0.01230220	0.01249812	0.00153000	0.026330	155,571.85	72,687.16	73,844.74	9,039.96	155,571.85
New Multi-residential	-	0.00615140	0.00624937	0.00153000	0.013931	-	-	-	-	-
Pipeline Taxable - full	5,733,000	0.00704090	0.00715303	0.00880000	0.022994	131,824.20	40,365.48	41,008.32	50,450.40	131,824.20
Res/Farm Taxable	420,663,869	0.00615140	0.00624937	0.00153000	0.013931	5,860,171.61	2,587,671.72	2,628,884.16	643,615.72	5,860,171.61
Managed Forests	3,495,500	0.00153790	0.00156234	0.00038250	0.003483	12,173.92	5,375.73	5,461.16	1,337.03	12,173.92
Landfill	-	0.20547340	0.20874549	0.00880000	0.423019	-	-	-	-	-
GRAND TOTALS	956,582,000					8,857,759.96	3,803,164.10	3,863,745.94	1,190,849.92	8,857,759.96
TOTAL - RESIDENTIAL						7,602,099.66	3,354,262.33	3,407,696.86	840,140.47	7,602,099.66
TOTAL - COMMERCIAL/INDUSTRIAL						1,255,660.30	448,901.77	456,049.09	350,709.44	1,255,660.30
						8,857,759.96	3,803,164.10	3,863,745.94	1,190,849.92	8,857,759.96

SCHEDULE "A" TO BY-LAW 2022-xx

Schedule "B"

### Municipality of West Elgin 2022 Budget

SALITY OF WEST
7998

	Rate Increase		2.36%
7998	Levy Increase		3.87%
	,		2022 Budget
Revenues			LOLL Duuget
Taxation		-\$	3,803,179.43
Local Improvements		-	59,537.85
PIL		-	100,000.00
Grants:			
GRANT - OMPF		-	1,873,400.00
GRANT - OPERATING GRANT - SAFE RESTART			-
GRANT - OCIF		-	430,629.00
GRANT - Ontario Cannabis			-
GRANT - CANADA DAY		-	5,000.00
GRANT - ONTARIO INVESTS			-
GRANT - SUMMER STUDENT		-	10,000.00
GRANT - MODERNIZATION			-
GRANT - ICIP: COVID Stream - Local Government		-	100,000.00
GRANT - Covid Recovery			-
GRANT - Enabling Accessibility		-	72.900.00
GRANT - Municipal Modernization (Modernization of Asset Tracking, Payroll & Timesheet Pro	cess)	-	79.200.00
GRANT - Municipal Modernization (Service Modernization & Digital Transformation Review)	,	-	132.288.00
GRANT - FCM Asset Management		-	50.000.00
Miscellaneous Revenue		-	185.550.00
Transfer to Reserves (OCIF)			430.629.00
Transfer from Reserves (Insurance)		_	55,000,00
			,
Departmental Summaries		ć	
Administration		ç	30,070.30 1 247 001 74
			1,247,001.74
Fire			230,787.38
File Balica Samicas			011,445.12
Police Services			978,808.00
Duilding Increation			05,212.00
			30,030.00
Emergency Measures			7,000.00
By-Law Enforcement			40,689.18
Animai Control		-	0.00
Roads			1,628,940.09
Service Ontario			6,155.40
Four Counties Transit			10,762.95
Street Lights			40,500.00
Sidewalks			47,937.78
Sewage - Rodney			-
Sewage - West Lorne			-
Water			-
Landfill			456,249.59
Cemeteries			5,500.00
Arena			170,296.72
Parks & Recreation			683,412.92
Port Glasgow Trailer Park		-	0.00
Libraries		-	0.00
Planning			74,978.96
Economic Development			100.00
Drains			30,348.50
Debentures			59,537.85
005		\$	0.00

# MUNICIPALITY OF WEST ELGIN 2022 CAPITAL BUDGET

		BUDGET 2022
Administration General		
Keyless access control		20,000
Asset Management Software		135,000
	\$	155,000
Buildings		
Municipal Office Renovations		430,000
Old Town Hall Building		20,000
	\$	450,000
Transit		
Transit Bus	\$	80,000
Libraries		
Rodney Library - Porch Roof Replacement		8,000
	\$	8,000.00
Fire		
SCBA Replacement/Conversion		80,000
Bunker Gear - PPE - see Note 3 Fire Operating Budget	_	20,432
	\$	100,432
Arena		
Roof Painting		25,000.00
Drain repair and eavestrough		10,000.00
	\$	35,000
Parks & Recreation		
Rec Centre - Roof and Eavestrough Replacement		60,000.00
Christmas Lights (Downtown Rodney & West Lorne)		50,000.00
Pull Type Finishing Mower - replacement		25,000.00
Bridge at the Marina		20,000.00
Pool liner and tile repair		15,000.00
	\$	170,000

## MUNICIPALITY OF WEST ELGIN 2022 CAPITAL BUDGET

		BUDGET 2022
Port G	lasgow Trailer Park	
	Stair Access to Beach	300,000.00
	Service area 4 - replace control panel	10,000.00
	Refurbish war monument & install gates - cont.	 10,000.00
		\$ 320,000
Roads		
	TRACTOR #5 - Upgrade	10,000
	BERM RETRIEVER	15,000
	WALK-BEHIND PACKER	15,000
	PUBLIC WORKS SHOP	75,000
	WALKER STREET RECONSTRUCTION - Design and Engineering	10,000
	RESURFACING OF SURFACE TREATED ROADS - Marsh line (from Kerr to Graham)	275,000
	FLEMING LINE BRIDGE - deck replacement	30,000
	WEST LORNE STORM WATER MASTER PLAN	100,000
	CAPITAL - Bridge 6 (Blacks @ McDougal) Culvert 6 (Blacks @ Kintyre) replacement	 870,000
		\$ 1,400,000
Sewer	Maintenance - Rodney	
	Rodney Sewage Refurbishment	 700,000
		\$ 700,000
Sewer	Maintenance - West Lorne	
	Replace existing alum pumps	25,000
	New ATS/transfer switch including staging and commissioning	60,000
	Fiber tie-in to both West Lorne and Rodney WPCPs and commissioning of SCADA network	75,000
	Conveyor/washer addition to bar screen	 35,000
		\$ 195,000

## MUNICIPALITY OF WEST ELGIN 2022 CAPITAL BUDGET

	BUDGET 2022
Sidewalks & Street Lights	
SIDEWALKS - West Lorne (Graham Rd Continuation to Marsh, Marsh to Todd Place)	 100,000
	\$ 100,000
Water	
Waterline Extension	50,000
AMR (Automatic Meter Reading) - Software and Hardware	200,000
Meter Replacement -	 30,000
	\$ 280,000
	\$ 3,893,000



## The Corporation of the Municipality of West Elgin

### By-Law No. 2022-41

### A By-law to Authorize the Execution of Memorandum of Understanding between the Lower Thames Valley Conservation Authority and The Corporation of the Municipality of West Elgin

**Whereas** Section 9 of the *Municipal Act, 2001, S.O. 2001, c.25*, as amended, provides that a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority; and

**Whereas** Section 21.1.1 of the *Conservation Authorities Act, R.S.O 1990*, as amended, provides that an authority may provide, within its area of jurisdiction, municipal programs and services that it agrees to provide on behalf of a municipality situated in whole or in part within its area of jurisdiction under a memorandum of understanding, or such other agreement as may be entered into with the municipality, in respect of the programs and services; and

**Whereas** it is deemed expedient that The Corporation of the Municipality of West Elgin enters into a Memorandum of Understanding with the Lower Thames Valley Conservation Authority for the purposes of propose of defining the roles and responsibilities of the services provided by the Lower Thames Valley Conservation Authority for land use planning services; and

**Now Therefore** the Council of the Corporation of the Municipality of West Elgin enacts as follows:

- 1. That the Corporation of the Municipality of West Elgin hereby authorizes the Memorandum of Understanding with the Lower Thames Valley Conservation Authority, identified as Schedule "A" attached hereto and forming an integral part of this By-law.
- 2. That the fees in Schedule 3 of the Memorandum of Understanding be collected by the Municipality of West Elgin on behalf of the Lower Thames Valley Conservation Authority as of July 1, 2022

- 3. That the CAO/Treasurer is hereby authorized and directed to execute such agreement and any related documents and affix the Seal of the Corporation of the Municipality of West Elgin thereto.
- 4. This by-law shall come into force and effect on July 1, 2022.

Read a first, second, and third time and passed this 23<sup>rd</sup> day of June, 2022.

Duncan McPhail Mayor Jana Nethercott Clerk SERVICE AGREEMENT/ Memorandum of Understanding (MOU)

#### BETWEEN

The CORPORATION OF THE MUNICIPALITY of WEST ELGIN

(the "Municipality")

AND

The LOWER THAMES VALLEY

**CONSERVATION AUTHORITY** 

(the "Conservation Authority" or "CA")

Date: June\_\_\_\_, 2022

Endorsed by all Parties and in effect as of \_\_\_\_\_, 2022

#### 1. THE PURPOSE of this agreement is to:

The Conservation Authority and the Municipality have a longstanding relationship of plan review activities. This MOU will be an important tool to help define roles and responsibilities within the context of a new protocol for land use planning service delivery.

The land use planning framework and the regulatory body under which Conservation Authorities operate in the Province has evolved into a significantly more complex system. The policy and regulatory systems have become more complex, with changing legislation, evolving Provincial Plans, with more specific and rigid tests for planning complete communities.

With a significantly evolved planning framework, it is important that an arrangement is in place to assist parties in managing growth and change while protecting the environment and public safety. It is crucial that the relationships between the parties and the roles and responsibilities in implementing the planning and regulatory framework are seamless, integrated and well understood.

This agreement only pertains to land use planning, infrastructure and development related issues. In this regard, the objectives of this MOU include ensuring that:

- each step of the planning review process is complementary, adds value to the decision making process, does not result in service duplication;
- the rigour of review is consistent with the scale and impacts of the project;
- the public and the natural environment is protected and natural heritage features are restored using a systems-based approach; and
- sharing information assists and expedites decision-making.

The purpose of this Memorandum includes:

- Identify the roles and responsibilities of the Parties and record their mutual understanding in planning policy and development matters (*e.g. CA will provide effective and timely plan review and technical clearance support/expertise to assist the Municipality in making decisions on planning documents and site-specific planning applications*);
- Set out the expectations for plan review and technical clearance on matters relating to natural heritage and water resources;
- Streamline the development application review process, municipal plan review system/process where opportunities exist;
- Improve alignment between planning services and conservation authority permitting processes;
- Establish a data and information sharing protocol;
- The MOU describes services in addition to those activities and services which are undertaken by the CA as part of their own legislative mandate or by agreement with others.

This MOU is intended to work in tandem with the legislative and policy framework for planning in the Province of Ontario. It is not intended to conflict with responsibilities that have been assigned to any of the Parties, either by statute, regulation, policy or other instrument. For example, the MOU is not intended to conflict with:

1. Responsibilities assigned to the Municipality in the following:

1.1 The Planning Act; and

1.2 Any MOU between the County of Elgin and the Province of Ontario relating to municipal plan review.

2. Responsibilities assigned to the Conservation Authority as of the signing of this MOU and subject to change, in the following:

2.1 The Conservation Authority Act and associated Regulations.

2.2 The MOU between the Conservation Authority (Conservation Ontario) and the Province of Ontario relating to municipal plan review, input and appeals relating to Natural Hazards (2001).

2.3 Responsibilities assigned to the Conservation Authority by the Municipality through the Planning Act and applicable Delegation By-law i.e., Natural Heritage (Section 2.1) review and input.

- 3. This MOU is not intended to conflict with or preclude any MOU between any municipality, county or other agencies.
- 4. The Parties commit to undertaking the following work as detailed in the body of this MOU and summarized in Schedule 1.

#### 2. DEFINITIONS

#### "Board"

Means the Board of Directors of the respective CA(s).

#### "Interests"

Means the interests of the Party as defined by its approved plans, policies, and programs.

#### "Natural Environment"

Means the natural heritage system and the water resource system including natural hazards and stormwater management.

#### "Natural Heritage System"

Means the same as the Provincial Policy Statement definition.

#### "Parties"

Means the upper- and lower-tier municipalities' planning policy and implementation departments and the Conservation Authority planning and development department.

#### "Plan Review"

The review of applications/studies as set out in the *Planning Act* or other relevant legislation; identifying the need for and assessing the adequacy of technical surveys, studies and reports relating to the watershed natural hazards, natural heritage and water policies for natural environment features or functions; and specifying and clearing conditions of approval. It also includes the review of municipal planning documents, such as Official Plans and amendments and may include studies associated with infrastructure development, such as Environmental Assessment Reports.

#### "Technical Clearance"

Assessing technical reports submitted by the proponent to determine if the reports satisfy the conditions through a comprehensive study (e.g. master environmental servicing plans, secondary plans, etc.) or plan review process and in order to clear the conditions of a plan of subdivision, severance application or other planning instrument.

#### "Technical Review"

Assessing technical reports submitted by the proponents' consultants in terms of applicable and most recent technical guidelines and standards and the approved terms of reference; specifying modifications or additional technical studies required and conditions of acceptance; validating the technical methods used to determine potential environmental impacts; identifying the nature and extent of mitigation measures required; recommending modifications to, or acceptance of, the technical report.

#### 3. GUIDING PRINCIPLES

This Memorandum of Understanding is based on the following principles. The parties agree to work collaboratively to:

a. Deliver timely, accurate, effective and customer-focussed planning services;

b. Eliminate unnecessary duplication to maximize the utilization of existing resources and technical expertise and, where possible, coordinate efforts;

c. Ensure the planning and regulatory systems are seamless, integrated, complementary and well understood;

d. Share mapping resources / layers when needed;

e. Continuously improve working relationships and enhance service performance of all Parties;

f. Monitor the performance of this MOU and service delivery; and

g. A data sharing agreement can be undertaken when the need arises. Staff will ensure that data sharing agreements are kept up to date.

#### 4. MOU Framework

- 4.1 For the purposes of this MOU, planning services have been defined and organized into two categories: 1) Policy Planning; and 2) Development Planning. By organizing the MOU in this manner, it is not intended to limit or define the service delivery method or the service delivery entity within each of the Parties. The MOU is organized in this manner for ease of reading and reference.
- 4.2 The Parties recognize that there may be initiatives, specific studies and technical studies in support of development applications that exhibit components of both policy planning and development planning.
- 4.3 For the purposes of this MOU, Policy Planning includes:
  - a. Provincial Plans, Policies and Initiatives
  - b. County Official Plan and Amendments
  - c. Local Official Plans and Amendments
  - d. Area Specific Plans (Secondary, Outline Plans and related Studies)
  - e. Community Improvement Plans and Incentives
  - f. Special Studies (e.g. watershed/subwatershed studies)
  - g. Guidelines

Section 5 of this MOU provides specific provisions.

- 4.4 For the purposes of this MOU, Development Planning includes:
  - a. Comprehensive Zoning By-laws
  - b. Zoning By-law Amendments
  - c. Plans of Subdivision and Condominium
  - d. Consents
  - e. Minor Variances
  - f. Part Lot Control
  - g. Site Plans

Section 5 of this MOU provides specific provisions.

#### 5. LAND USE PLANNING ROLES AND RESPONSIBILITIES

The CA will endeavor to provide timely comments / advice to the Municipality (refer to Schedule 2) on planning matters, and the Municipality will ensure consistency with Provincial Policies and the Official Plan Policies with respect to any planning application. The Municipality and the Conservation Authority agree that the CA will provide comments / advice as to whether planning applications are consistent with the PPS (S. 2.1, 2.2 and S. 3.1) for the following:

- 1. Zoning Bylaw comprehensive reviews and amendments
- 2. Secondary Plans/Outline Plans
- 3. Minor Variance
- 4. Site Plan Control
- 5. Watershed/subwatershed studies
- 6. Guidelines (e.g. Stormwater, etc.)
- 7. Site alteration by-laws

The Conservation Authority will also provide comments assessing the adequacy of technical environmental studies in meeting PPS (S. 2.1, 2.2 and S. 3.1) policy requirements and objectives. The CA will review documents that assess impacts on the natural environment related to:

- significant wetlands, coastal wetlands, local and unevaluated wetlands;
- significant woodlands;
- significant valley lands, valley lands and stream corridors;
- natural hazards (flooding and erosion);
- hazardous sites (unstable soils or bedrock unstable slopes);
- Source Water Protection areas (e.g. SGRA, HVA's, WHPA & IPZ's);
- ground water recharge areas;
- surface water quantity and quality;
- Hydrology and Hydraulic documents and modelling (e.g. LID, SWM Ponds, etc.);
- Impact and mitigation measures related to natural hazards.

The Conservation Authority will also provide comments:

- advising the Municipality of the adequacy of technical environmental studies in relation to the Municipality's Official Plan policy requirements and objectives;
- on the need for technical reports, the adequacy with reference to relevant guidelines/standards, or related conditions of approval, including but not limited to such studies or plans as:
  - Stormwater management
  - Lot grading and drainage
  - Geotechnical
  - Hydrogeological
  - Erosion and Sediment Control
  - Coastal Engineering Studies

- Environmental Impact Studies and related natural heritage impact and mitigation measures
- Fluvial Geomorphology
- Wetland water balance
- report defining features and assess the long-term ecological function and biodiversity of natural heritage systems, identifying opportunities where applicable for restoration or improvements.
- review documents that assess impacts on the natural environment related to:
  - significant wildlife habitat;
  - habitats of threatened and endangered species;
  - Species At Risk;
  - watercourses, fish and aquatic habitat;
  - areas of natural and scientific interest;
  - significant woodlands;
  - significant wetlands, local wetlands and coastal wetlands;
  - significant valleylands;
- to identify, where appropriate, the Fisheries and Oceans Canada self-assessment process pursuant to the federal Fisheries Act and other similar pieces of legislation affecting the interests of the Conservation Authority;
- to assist in the technical aspects of applying alternative development standards as a best management practice for stormwater management purposes (e.g. Low Impact Development (LID projects)) and enhancement of natural heritage features and functions.
- 5.1 The Parties agree that a high degree of policy alignment is important in advancing an integrated and seamless planning system.
- 5.2 Local Official Plans and Amendments
  - 5.2.1 The Local Municipality leads and adopts policy based Local Official Plans and Amendments.
  - 5.2.2 Prior to initiating policy based Official Plans or Official Plan amendments, the Local Municipality will share information on the initiative and seek input from the Conservation Authority.
  - 5.2.3 The Conservation Authority will review and provide comments on policy-based Local Official Plan Amendments as it relates to their interests and mandates.
- 5.3 Area Specific Plans (Secondary Plans and Related Studies)
  - 5.3.1 The Local Municipality will lead and adopt Area Specific Plans for growth areas.
  - 5.3.2 In developing Area Specific Plans, the Local Municipality will engage the Conservation Authority as it relates to their interests and mandates.
  - 5.3.3 The Local Municipality is responsible for undertaking studies in support of Area Specific Plans.

- 5.3.4 The Local Municipality will work collaboratively with the Conservation Authority to identify and scope the necessary studies required for the Area Specific Plans.
- 5.3.5 The Parties agree to work together to develop a Terms of Reference for each study required.
- 5.3.6 That the Terms of Reference will ensure that any Party involved in the review of any study, and where applicable, will provide technical clearance in writing to the Local Municipality in the timelines defined by the Municipality.
- 5.3.7 The Parties agree that Terms of Reference for studies related to Area Specific Plans (e.g. subwatershed studies) must address key policy tests while being sensitive to context. Area Specific Plans for redevelopment areas may require the Parties to scope, modify or waive study requirements to recognize the existing policy framework and built context for these areas.
- 5.3.8 The Parties have a mutual interest in advancing work on Area Specific Plans. In recognition of this mutual interest, the Parties agree to work within the timelines and scope set out in the Terms of Reference under the proviso that all applicable materials have been received within the agreed to Area Specific Plans / Study initiation timelines.

#### 5.4 Special Studies

- 5.4.1 From time to time the Parties will engage in special studies (e.g. watershed / subwatershed, geotechnical, flood line studies, Municipal Stormwater/Servicing Master Plans, etc.) related to land use and regulatory matters that affect the Municipality and the Conservation Authority.
- 5.4.2 The Parties will develop a work plan to collaboratively engage in these studies when it has been determined to be of mutual interest.
- 5.5 Attending Meetings
  - 5.5.1 The CA will attend any meetings (council and/or planning meetings) and public consultation meetings when requested by the Municipality.

#### 6. ROLES & RESPONSIBILITIES in the PLANNING SYSTEM relating to IMPLEMENTATION PLANNING

- 6.1 All Parties agree that in reviewing and assessing development applications, comments must be scoped based on:
  - 6.1.1 Legislative or Regulatory authority;
  - 6.1.2 Council or Board approved policies and by-laws;
  - 6.1.3 A consideration of the built context; and
  - 6.1.4 Interests that have been identified through pre-consultation, terms of reference, comprehensive complete application requirements, and/or requisite studies.
- 6.2 The Parties agree that it is important to advance an expeditious review of development applications based on Planning Act timelines. In all cases, the Parties will endeavour to provide comments to the approval authority that:
  - 6.2.1 Will enable the approval authority of the particular planning application to make a decision; and
  - 6.2.2 Are in accordance with the timeframes set out in Schedule 2.
- 6.3 The CA will respond to general inquiries from the Municipality and applicants, will participate in informal or formal pre-consultation meetings with applicants and the Municipality (or provide written comments), and provide expert witness support to the Municipality as necessary where the subject lands involve natural hazards, natural heritage or CA regulated lands.
- 6.4 To ensure that the approval authority is in a position to make a decision on the application within the Planning Act timeframes, the Parties agree to share best practices and to examine ways to harmonize policies and approaches related to pre-consultation and complete application requirements.
- 6.5 The Parties agree to monitor and report on service delivery measures based on common goals and metrics, with an annual or semi-annual report as required by the Municipality.

#### 7. PLANNING for the NATURAL ENVIRONMENT

- 7.1 The Parties agree that a greater degree of coordination and timeliness between the Municipality and the Conservation Authority is necessary for advancing an integrated and seamless planning system as it relates to the natural environment.
- 7.2 The Parties agree that there is significant opportunity to improve and to clarify roles and responsibilities in planning for the natural environment.
- 7.3 The Parties agree to work collaboratively to advance an integrated and seamless planning model, based on the following principles:
  - a. a high degree of policy alignment is important in advancing an integrated and seamless planning system;
  - b. the rigour of environmental review must match the scale and nature of impacts;
  - c. planning for the environment should not revisit the principle of land use at the sitespecific stage when defined at the policy stage(s);
  - d. more effort needs to be put 'up front' in defining the components of the natural heritage system (refer to the Elgin Natural Heritage Systems Study);
  - e. good information and data lead to good policy;
  - f. eliminate unnecessary duplication;
  - g. optimize the use of staff expertise; and
  - h. seek opportunities for inter-municipal/agency educational workshops.

#### 8. DATA and INFORMATION SHARING

- 8.1 The Parties will work together to define a screening map and guidelines to assist the Municipality in determining when an application will be circulated for review.
- 8.2 The Parties agree that data sharing, data modelling and GIS are important to service efficiencies and will establish and/or participate on a working group to advance an open data approach among the Parties, provided that the data sources are not restricted under third party licensing.

#### 9. DISPUTE RESOLUTION

- 9.1 The LTVCA will have regard for previous comments provided by LTVCA staff. Any change in comments based on updated legislation or new information or other matters will be discussed with the Municipality in advance of any formal correspondence being sent out to the Municipality.
- 9.2 Where a dispute arises between two or more Parties' staff pertaining to service matters undertaken in sections 5, 6 or 7 above, the Parties agree that the staff will implement dispute resolution practices utilizing the following principles:
  - a. Agree to a fair process for mediating issues;
  - b. Utilize the services of a neutral facilitator, if required;
  - c. Discuss the impasse item and avoid blame;
  - d. Accept responsibility;
  - e. Identify common agreement / ground;
  - f. Identify all options to resolve;
  - g. Select best option.
- 9.3 The Municipality or the Conservation Authority may recommend that a third party consultant be engaged to undertake any particular review where special expertise is required, or the authority has a conflict of interest or where it is otherwise mutually agreed that it would be in the best interest of the planning process.

#### 10. DURATION AND FORMAL REVIEW

- 10.1 This MOU shall come into effect on the date of the last party to sign this MOU and shall remain in effect until such time as it may be replaced by an updated MOU resulting from a mandatory review that will regularly take place no more than five (5) years from the effective date of this MOU.
- 10.2 This MOU may be reviewed at any time before the mandatory review if agreed to by the Parties, particularly when Provincial legislation, CA Act Regulations or plans have been amended.
- 10.3 The mandatory review shall be overseen by the Parties' CAOs with any final recommended changes being subject to full agreement by all Parties.

#### 11. GENERAL

- a) The CA will respond to general inquiries from the Municipality and applicants, participate in informal or formal pre-consultation meetings with applicants and the Municipality (or provide written comments), and provide expert witness support to the Municipality as necessary where the subject lands involve natural hazards or CA regulated lands.
- b) Nothing in the agreement precludes the Conservation Authority from commenting to the Municipality, and implementing their regulatory responsibilities, as they would normally exercise their rights under the *Planning Act*, the *Conservation Authority Act* (as amended), *Environmental Assessment Act*, recommendations from the Provincial Flood Advisors Report, delegated responsibilities or other applicable legislation.
- c) Nothing in this agreement precludes the Municipality from exercising responsibility under the *Municipal Act, the Planning Act,* the County Official Plan, the Municipal Official Plan or any other statutory requirement.
- d) Nothing in this agreement precludes the parties from respectfully disagreeing with comments provided by the other party.
- e) Where the Conservation Authority is in conflict between legislated responsibilities and the responsibilities of this agreement, the Municipality may seek third party opinions. This agreement would not prohibit the Municipality seeking third party opinions at any time or for any other matters.
- f) The Conservation Authority and the Municipality will endeavor to have open communication on activities or programs which may impact each other's mandates or responsibilities – e.g. the Municipality proposing to amend general by-laws; the CA undertaking work for the province to identify natural features.

#### **12.** TERMS OF THE AGREEMENT

- a) The Municipality and the Conservation Authority agree that:
  - The term of this Agreement shall be for a period of five (5) years from the date of execution by the Municipality and the Agreement shall be automatically extended for an additional five (5) year term, on the same terms and conditions as contained herein at the discretion of the Municipality and the Conservation Authority, until terminated by any of the parties.
  - 2. The Municipality and the Conservation Authority will review this Agreement, to consider changes in programs of the parties or changes in Provincial policies, at least six months prior to the expiry of each five (5) year term. The Conservation Authority's CAO or Planning Department will monitor the agreement and its expiry;
- b) Any party may terminate this Agreement at any time upon delivering six (6) months written notice of termination, by registered mail, to all of the parties, which notice shall be deemed to be received on the third business day from the date of mailing.
- c) Any notice to be given pursuant to this Agreement shall be delivered to the parties at the following address:

Municipality of West Elgin 22413 Hoskins Line Rodney, ON NOL 2CO Attention: <u>Mayor</u>

Lower Thames Valley Conservation Authority

100 Thames Street

Chatham, ON N7L 2Y8

Attention: <u>CAO / Secretary-Treasurer</u>

#### 13. IMPLEMENTATION

The Municipality and the Conservation Authority agree:

- That the Municipality would be responsible for submitting meeting minutes/records of outcomes of pre-consultation meetings.
- The Municipality will establish a mechanism to determine complete application requirements as outlined in the County and Municipal Official Plans and to determine the technical checklist required for these studies. Refer to the technical checklist included in Schedule 1.
- That fees for planning services will be collected by the Municipality and will be remitted to the CA on a quarterly basis as outlined in Section 15.

#### 14. SERVICE DELIVERY STANDARDS

- a) The Municipality shall set timeframes for responding to planning document amendments and development applications in keeping with the requirements of legislated timelines and included in Schedule 2.
- b) Where an application is complex (requiring more than 3.5 hours of staff review/administration time), a pre-consultation meeting between the Municipality, respective Conservation Authority and the applicant and their agents may take place.

#### 15. CONSERVATION AUTHORITY FEES

All parties of this MOU concur that the screening of applications is desirable. This process will ensure that only the appropriate applications are circulated to the Conservation Authority. Although this MOU does not contain specific provisions for screening, both the Municipality and the CA are committed to this end to ensure the best possible service.

#### **Collection of Fees**

The Conservation Authorities Act provides the legislative basis to allow conservation authorities in Ontario to charge fees for services approved by the Minister (*Policies and Procedures for the Charging of Conservation Authority Fees*). Section 21 (m.1) of the Act, allows for the collection of fees for planning and development related activities, such as permitting, plan review and public and legal inquiries.

The LTVCA's fees are based on the following: partial user pay principle; adequate consultation and notification; and opportunity or right to an appeal.

For the review and provisions of comments for all planning applications, a fee will be assessed by the CA as outlined in Schedule 3. This fee schedule may be changed from time to time (with approval of the LTVCA Board of Directors) without the need to amend the agreement.

The Municipality will collect the fee on behalf of the conservation authority at the time an application is submitted. Fees collected from planning submissions will be tracked by both the Municipality and the CA, with the Municipality to remit the collected fees quarterly.

#### Appeal

An applicant, proponent, or developer has the right to appeal should there be any dissatisfaction with the prescribed fees. Any appeal shall be heard by the LTVCA's CAO/Secretary-Treasurer, with subsequent appeal to the Board of Directors.

#### Monitoring

The fees will be assessed on an annual basis by the LTVCA Board of Directors to evaluate their effectiveness and fairness. This document may be amended by mutual agreement from time to time, to reflect changes in programs, funding and personnel for both agencies, or changes to the CA Act or provincial policy.

#### 16. List of Schedules to the MOU

Schedule 1: Summary of MOU Parties' Commitments/Undertakings 2022 to 2027

Schedule 2: Development Application review timelines

Schedule 3: LTVCA Planning Fee Schedule

THE MUNICIPALITY	THE LOWER THAMES VALLEY
Of WEST ELGIN	CONSERVATION AUTHORITY
CAO / Clerk-Treasurer	CAO / Secretary-Treasurer
_Magda Badura	Mark Peacock, P. Eng.
Chief Administrative Officer	CAO / Secretary-Treasurer
Date:	Date:

### **SCHEDULE 1**

#### SUMMARY OF MOU PARTIES' COMMITMENTS/UNDERTAKINGS 2022 to 2027 (60 months)

The following provides brief descriptions of the content work and outcomes expected for each undertaking. Upon initiation of each undertaking, further details will be developed and agreed upon by all Parties, taking into account the scope of the proposal related to its size and complexity. Listed requirements will occur at different phases of development (i.e. for plan of subdivision, stormwater management facility design may not be a requirement of a draft plan application, rather as part of the development process).

#### **CA-Municipal Technical Checklist Recommendations for Planning Applications**

#### **Official Plan Amendments**

- Covering letter, which outlines the proposal, provides contact names and describes all preliminary consultation and submission contents
- Application Fee (refer to CA Fee Schedule)
- Appropriate Plans/Drawings
- Natural Systems Map (natural hazards and natural heritage features with requisite buffers, overlaid with existing site conditions, property boundaries, and proposed development and site alteration)
- Topographic Information.

#### Potential technical requirements

- A list of support information and materials for Planning Act applications is typically provided in Official Plans; this list should be referred to for consideration
- Conceptual Channel Crossings Assessment
- Subwatershed Study
- Scoped or Full Comprehensive Environmental Impact and Enhancement Study
- Functional Servicing Plan/Stormwater Management Study
- Floodline Delineation Study/Hydraulics
- Functional Servicing Plan/Stormwater Management Study
- Geotechnical/Slope Stability Study
- Preliminary Grading Plans
- Fluvial Geomorphology Study
- Hydrogeological Assessment
- Conceptual Channel Crossings Assessment
- Low Impact Development Opportunity Assessment, as required by municipal policy
- Scoped or Full Environmental Impact and Enhancement Study
- Water Balance Analysis
- Watercourse Erosion Analysis
- Other reports/studies identified through the checklists or staff consultation.

#### A-2: Zoning By-law Amendments

- Covering Letter, which outlines the proposal, provides contact names and describes all preliminary consultation and submission contents
- Application Fee (Refer to Fee Schedule 3)
- Appropriate Plans/Drawings
- Natural Systems Map (natural hazards and natural heritage features with requisite buffers, overlaid with existing site conditions, property boundaries, and proposed development and site alteration)
- Topographic Information.

#### **Potential technical requirements**

- Channel Crossings Assessment
- Floodline Delineation Study/Hydraulics
- Functional Servicing Plan
- Geotechnical/Slope Stability Study
- Grading Plans
- Hydrogeological Assessment
- Low Impact Development Opportunity Assessment, as required by municipal policy
- Scoped or Full Environmental Impact and Enhancement Study
- Stormwater Management Study
- Structural Elevations and Construction Details
- Water Balance Analysis
- Watercourse Erosion Analysis
- Other reports/studies identified through the checklists or staff consultation.

#### A-3: Plans of Subdivisions

- Covering Letter, which outlines the proposal, provides contact names and describes all preliminary consultation and submission contents
- Application Fee (See Fee Schedule)
- Appropriate Plans/Drawings
- Natural Systems Map (natural hazards and natural heritage features with requisite buffers, overlaid with existing site conditions, property boundaries, and proposed development and site alteration)
- Topographic Information.

#### **Potential technical requirements**

- Channel Crossings Assessment
- Erosion and Sediment Control Plans
- Floodline Delineation Study/Hydraulics
- Functional Servicing Plan
- Geotechnical/Slope Stability Study
- Grading Plans
- Hydrogeological Assessment
- Landscaping/Site Rehabilitation Plan

- Low Impact Development Opportunity Assessment, as required by municipal policy
- Scoped or Full Environmental Impact and Enhancement Study
- Stormwater Management Facility Design
- Stormwater Management Study
- Structural Elevations and Construction Details
- Topsoil Stripping Review
- Water Balance Analysis
- Watercourse Erosion Analysis
- Restoration/Compensation Plan for vegetation that has been or will be removed.
- Other reports/studies identified through the checklists or staff consultation.

#### A-4: Site Plan Controls

- Covering Letter, which outlines the proposal, provides contact names and describes all preliminary consultation and submission contents
- Application Fee (See Fee Schedule)
- Appropriate Plans/Drawings
- Natural Systems Map (natural hazards and natural heritage features with requisite buffers, overlaid with existing site conditions, property boundaries, and proposed development and site alteration)
- Topographic Information.

#### Potential technical requirements

- Channel Crossings Assessment
- Conformity Reports (Greenbelt, Niagara Escarpment, ORM, Rouge Park/Rouge Park North)
- Erosion and Sediment Control Plans
- Floodline Delineation Study/Hydraulics
- Functional Servicing Plan
- Geotechnical/Slope Stability Study
- Grading Plans
- Hydrogeological Assessment
- Landscaping/Site Rehabilitation Plan
- Low Impact Development Opportunity Assessment, as required by municipal policy
- Scoped or Full Environmental Impact and Enhancement Study
- Stormwater Management Facility Design
- Stormwater Management Study
- Structural Elevations and Construction Details
- Topsoil Stripping Review
- Water Balance Analysis
- Watercourse Erosion Analysis
- Other reports/studies identified through the checklists or staff consultation.

#### A-5: Consents (Severances) and Minor Variances

- Covering Letter, which outlines the proposal, provides contact names and describes all preliminary consultation and submission contents
- Application Fee (See Fee Schedule)

• Appropriate Plans/Drawings.

#### **Potential technical requirements**

- Erosion and Sediment Control Plans
- Floodline Delineation Study/Hydraulics
- Geotechnical/Slope Stability Study
- Grading Plans
- Hydrogeological Assessment
- Landscaping/Site Rehabilitation Plan
- Natural Systems Map (natural hazards and natural heritage features with requisite buffers, overlaid with existing site conditions, property boundaries, and proposed development and site alteration)
- Scoped or Full Environmental Impact and Enhancement Study
- Structural Elevations and Construction Details
- Topographic Information
- Other reports/studies identified through the checklists or staff consultation.
## **SCHEDULE 2**

#### **Non-Statutory Development Application Review Timelines**

The following table is an example, which describes the non-statutory timeframes for development review applications that the parties will aim to achieve, broken down by certain major application types. Municipalities and CA are to negotiate an appropriate timeframe for review of these applications as part of the MOU process. **Note**: should the local Municipality recognize that there is a specific issue that requires additional time, the timelines may be extended.

APPLICATION TYPE	PRE- CONSULTATION	CIRCULATION (for pre-consultation, or after an application is deemed complete, or for any subsequent circulations)	COMMENTS AFTER FIRST CIRCULATION
Site specific	Meeting scheduled	Upper-tier Municipality to	Parties to
County Official	with all parties and	circulate to all parties	provide
Plan	the applicant within	within x-3 business days	comments
amendments	x-21		within X- 21
	calendar days of request <sup>1</sup>		calendar days
Site specific	Same as above	Local Municipality to	Parties to
local Official		circulate to all parties	provide
Plan		within x-3 business days	comments
Amendments			within X-21
			calendar days
Site specific	Same as above	Local Municipality to	Parties to
Zoning By-law		circulate to all parties	provide
Amendments		within x-3 business days	comments
			within X-21
			calendar days
Plans of	Same as above	Local Municipality to	Parties to
Subdivision or		circulate to all parties	provide .
Condominium		within x-3 business days	comments
			within x-21
			calendar days
			agrees there is a
			specific issue
			that requires
			additional time
			to resolve

Site Plans	Same as above	Local Municipality to circulate to all parties within x-3 business days	Parties to provide comments within x-14 calendar days unless the local Municipality agrees there is a specific issue that requires additional time to resolve
Consents and Minor Variances		Local Municipality to circulate to all parties within x-3 business days	Parties to provide comments within x-7 calendar days

<sup>&</sup>lt;sup>1</sup>To convene a pre-consultation meeting, the lead agency must have sufficient information from the applicant so that the parties can provide advice.

<sup>\*</sup>Regardless of the above noted review timeline schedule, the CA will endeavour to meet any set timelines the municipality requires in order to meet their mandated Planning Act timelines.

## **SCHEDULE 3**

#### LTVCA Planning Fee Schedule

#### Board Approved: April 21, 2022

Plan Review Fee Schedule	New LTVCA Planning Fee Schedule
legal / private / realtor inquiries	\$125.00
<ul> <li>clearance letters for subdivision/condominium approval (applies to each phase of subd. requested) (from draft plan to clearance, including SWM review) (where permit fee not required)</li> <li>\$115/lot (max \$10,000 per phase) detailed SWM Review and all other review (outside of regulated area)</li> <li>\$350/lot detailed SWM Review and all other review (within regulated area with each lot receiving a permit) (current fee)</li> </ul>	<ul> <li>a. \$115/lot (max \$10,000 per phase) (outside of regulated area)</li> <li>b. \$350/lot (within regulated area)</li> <li>c. \$1,200 preliminary SWM review</li> </ul>
major OP/ZBLA industrial, commercial, institutional, subdivision, etc.	\$300.00 (no SWM review required)
minor OP/ZBLA single family residence	\$200.00
consent	\$200.00
minor variance	\$115.00
site plan control / approval	\$200.00
OPA / ZBLA combination	\$275.00
consent / minor variance with ZBLA combination	\$250.00
consent with minor variance combination	\$250.00
multiple consent applications on a single application	\$115.00/lot (unregulated) \$350.00/lot (regulated)
input and review of relevant EIS's / EA's and other major studies, proponent driven	\$1,500.00
LTVCA staff appearing as an expert witness at a Committee of Adjustment hearing or Ontario Land Tribunal hearing: a. Acting on behalf of the Municipality b. At the request of the proponent	a. no fee charged

## **SCHEDULE 3**

#### LTVCA Planning Fee Schedule

#### Board Approved: April 21, 2022

Plan Review Fee Schedule	New LTVCA Planning Fee Schedule
legal / private / realtor inquiries	\$125.00
<ul> <li>clearance letters for subdivision/condominium approval (applies to each phase of subd. requested) (from draft plan to clearance, including SWM review) (where permit fee not required)</li> <li>\$115/lot (max \$10,000 per phase) detailed SWM Review and all other review (outside of regulated area)</li> <li>\$350/lot detailed SWM Review and all other review (within regulated area with each lot receiving a permit) (current fee)</li> </ul>	<ul> <li>a. \$115/lot (max \$10,000 per phase) (outside of regulated area)</li> <li>b. \$350/lot (within regulated area)</li> <li>c. \$1,200 preliminary SWM review</li> </ul>
major OP/ZBLA industrial, commercial, institutional, subdivision, etc.	\$300.00 (no SWM review required)
minor OP/ZBLA single family residence	\$200.00
consent	\$200.00
minor variance	\$115.00
site plan control / approval	\$200.00
OPA / ZBLA combination	\$275.00
consent / minor variance with ZBLA combination	\$250.00
consent with minor variance combination	\$250.00
multiple consent applications on a single application	\$115.00/lot (unregulated) \$350.00/lot (regulated)
input and review of relevant EIS's / EA's and other major studies, proponent driven	\$1,500.00
LTVCA staff appearing as an expert witness at a Committee of Adjustment hearing or Ontario Land Tribunal hearing: a. Acting on behalf of the Municipality b. At the request of the proponent	a. no fee charged



# The Corporation Of The Municipality Of West Elgin

## By-Law No. 2022-43

### Being a By-Law to confirm the proceedings of the Regular Meeting of Council held on June 23, 2022.

**Whereas** Section 5(1) of the Municipal Act, 2001, S.O. 2001, c.25, as amended, the powers of a municipality shall be exercised by council; and

**Whereas** Section 5(3) of the Municipal Act, the powers of Council shall be exercised by bylaw; and

**Whereas** it is deemed expedient that proceedings of Council of the Corporation of the Municipality of West Elgin as herein set forth be confirmed and adopted by by-law;

Now therefore the Council of the Municipality of West Elgin enacts as follows:

- 1. That the actions of the meeting of Council held on June 23, 2022, in respect of each recommendation, motion and resolution and other action taken by the Council at this meeting, is hereby adopted and confirmed as if all such proceedings were expressly embodied in this by-law.
- 2. The Mayor and proper officials of the Corporation of the Municipality of West Elgin are hereby authorized and directed to do all things necessary to give effect to the action of the Council referred to in the preceding section hereof.
- 3. The Mayor and Clerk are hereby authorized and directed to execute all documents necessary in that behalf and to affix the Seal of the Corporation of the Municipality of West Elgin.

Read a first, second, and third time and finally passed this 23<sup>rd</sup> day of June, 2022.

Duncan McPhail Mayor Jana Nethercott Clerk