



Subject: *Elmsdale Lumber Company Limited - Proposed Containerized Biochar Facility*
To: CAO for Planning Advisory Committee, April 18, 2023
Date Prepared: April 12, 2023
Related Motions: PAC20(52), PAC20(53), C20(253), PAC21(9), C21(63), PAC23(3), and C23(13)
Prepared by: Debbie Uloth, Project Planner
Approved by: John Woodford, Director of Planning and Development

Summary

Elmsdale Lumber Company Limited initially submitted an application for a nearly 5,000 m² biochar production facility in August 2020. The application consisted of two parts, the redesignation and rezoning of a portion of the applicant's lands to Industrial Commercial (IC) and a substantial amendment to an existing development agreement. The applicant is still proceeding with the redesignation and rezoning portion of the application but the substantial development agreement amendment application has been changed to allow for a 1,200 m² containerized biochar production facility.

A public information meeting on the initial application was held on December 1, 2020, and first reading of the proposed mapping amendments was given by Council on February 24, 2021.

In December of 2022, Elmsdale Lumber Company Limited submitted a request to amend their planning application to permit a containerized biochar production facility. The containerized facility is proposed to be located on the existing lumber mill site (PID 45082773). Depending on the results of the engineering observations, it would be the goal of the applicant to then apply for the original biochar production facility.

A second public information meeting was held on March 7, 2023, for the containerized biochar facility. Notes from the meeting have been attached as Appendix C.

Financial Impact Statement

There is no immediate financial impact from the recommendations in this report. There would be little if any, financial impact from the development of the containerized biochar production facility.

Recommendation

To give initial consideration to substantially amend a development agreement and to authorize staff to schedule a public hearing.

Recommended Motion

Planning Advisory Committee recommends that Council:

- *give initial consideration to substantially amend an existing Development Agreement for a containerized biochar production facility on lands located at 604 Highway 2, Elmsdale (PID 45082773) to enable a public hearing; and*
- *authorize staff to schedule a public hearing.*

Background

Elmsdale Lumber Company Limited initially applied for a Planning application in August 2020. The application proposed to change a portion of the Generalized Future Land Use Designation of land identified as PID 45342938 from Established Residential Neighbourhood (ER) Designation to Industrial Commercial (IC) and to rezone the same from Two Dwelling Unit Residential (R2) Zone to the Industrial Commercial (IC) Zone. The IC Zone would have enabled Municipal Council to consider substantially amending an existing development agreement for the lumber mill, to allow for a 5,000 m² biochar production facility. The initial application had a public information meeting on December 1, 2020, and was given first reading on February 24, 2021. Additional information on the proposed biochar facility and the impacts on the community was requested by Planning staff prior to moving forward with the application.

In December 2022, Elmsdale Lumber Company Limited updated its application. The purpose of the updated application is to permit a containerized biochar production facility to allow observation and testing to demonstrate that noise levels and emissions are within acceptable levels for the future development of the 5,000 m² facility. The containerized facility is proposed to be located on the existing lumber mill site (PID 45082773). Depending on the results of the engineering observations, it is the goal of the applicant to then apply for the original biochar production facility at a future date.

The applicant is still requesting an amendment to a portion of the land use designation and zoning of PID 45342938 to allow for future consideration of a development agreement for the 5,000 m² biochar facility at a future date.

Subject Property

The subject properties are shown on the map to the right and are identified as PID 45342938 and PID 45082773 (604 Highway 2, Elmsdale). The total area of the subject properties is approximately 23 ha.

Property identified as PID 45342938 is currently split zoned Two Dwelling Unit Residential (R2) Zone and Industrial Commercial (IC) Zone, with the majority of the property being zoned R2. PID 45082773 is zoned Industrial Commercial (IC) Zone with a small portion of it being Moderate Risk Floodplain Overlay (MF) Zone, and this property is where the existing lumber mill is located.

Adjacent property uses and zones include residential zoned lands to the north and south, Village Core (VC) Zone commercial uses across the street, and Highway 102 borders the rear of the subject lands. The Elmsdale District School is zoned Institutional Use (IU) Zone.

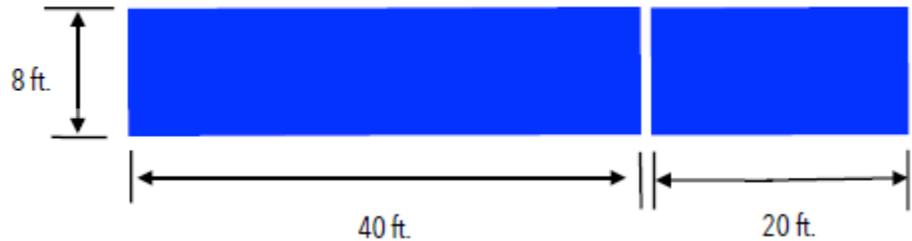


Development Proposal

The purpose of the application is to substantially amend the existing development agreement to permit a containerized biochar production facility. Under the existing development agreement, the applicant is

permitted to operate the lumber mill on PID 45082773, up to a maximum of 76,000 ft². Due to the potential of the proposed biochar production facility being obnoxious, the existing development agreement is required to be substantially amended. In addition, the maximum footprint of all buildings is proposed to be increased to allow for the containerized facility.

The containerized biochar production unit is 1/10th the scale of the originally proposed biochar production facility. Enabling the development of the containerized facility will allow professional engineers to observe and demonstrate the results are within tolerance for the nearby



school and neighbourhood. As proposed, the facility will undergo an 8-month trial for observations of noise levels and levels of emissions. These results can then be scaled to enable consideration of the original full-sized biochar production facility at a future date. The intention would be that the Municipal Development Officer would receive documentation at the 8-month mark on the engineer’s observations. The containerized biochar production facility would continue to operate after the 8-month period.

As part of the application, Elmsdale Lumber Company Limited is still requesting mapping amendments to the land use designation and zone of a portion of PID 45342938 in order to allow for the future consideration of a full-scale biochar production facility. Proposed GFLUM and LUB amendment maps have been attached as Appendix B. The maps show the portion of land to be redesignated and rezoned to Industrial Commercial (IC).

STRATEGIC ALIGNMENT

Two of the Key Strategies from the Strategic Plan are Strong Community and Economic Prosperity. Providing economic opportunities helps to create a vibrant community where people can live and work in their community.

LEGISLATIVE AUTHORITY

The Municipal Government Act, Part III gives legislative authority for this application. This section outlines the process for these amendments to be considered, including the advertisements for a Public Hearing.

FINANCIAL CONSIDERATIONS

There would be little if any, financial impact from the development of the containerized biochar production facility.

Policy Analysis

As part of the initial application, Planning staff consulted with our reviewing agencies. In considering the updated application much of the feedback from the initial consultation is still relevant.

REVIEWING AGENCIES

Nova Scotia Public Works has reviewed the information submitted by Elmsdale Lumber Company Limited and have indicated that “...increased truck traffic is not expected, and a negative traffic impact is not anticipated.”

Planning staff did request comments from the Chignecto Central Regional Centre for Education and from the Principal at Elmsdale District Elementary School, as part of the initial application; however, no comments were received. Staff have sent a second letter to the Chignecto Central Regional Centre for Education outlining the updated application.

An Environmental Assessment is not required for the proposed application. Although an Environmental Assessment is not required an Industrial Approval is required by the Government of Nova Scotia. An Industrial Approval considers a whole range of items such as noise, emissions, effluent, dust, and other items. As part of an Industrial Approval, the applicant also requires confirmation that the proposed use is a permitted land use in the Municipality.

There is no water or wastewater services required; therefore, Infrastructure and Operations have no comments. Updated application information will be forwarded to Elmsdale Fire and Emergency Services.

ENABLING POLICIES

As identified in the MPS, Council's goal for the IC Zone is for *"the Industrial Commercial (IC) Designation to reduce any potential conflicts which may arise between industrial-based development and less intensive land use..."*, which Council shall consider as part of this application. Council also shall consider Policy ED42, which states that *"Council shall establish the Industrial Commercial (IC) Designation for the purpose of grouping industrial related uses such as manufacturing, process, and related heavy commercial uses, which are generally of a regional commercial nature, to reasonably allow for the development of such uses and to facilitate a desirable growth pattern for communities."* One of the difficulties with evaluating the application is that residential development has grown up around the lumber mill and now the mill has become a part of a growing serviced community. Changes that take place on the Elmsdale Lumber Company Limited lands has a direct impact on the surrounding community.

Policy IM10, permits Council to consider private applications to amend the MPS where the proposed amendments are in the best interest of the Municipality. Therefore, Council may consider the application for the containerized biochar production unit, if they feel the proposal is in the best interest of the Municipality.

First reading of the proposed mapping amendments to change a portion of the Generalized Future Land Use Designation of land identified as PID 45342938 from Established Residential Neighbourhood (ER) Designation to Industrial Commercial (IC) Designation and to rezone the same from Two Dwelling Unit Residential (R2) Zone to the Industrial Commercial (IC) Zone, was given by Council at their February 24, 2021 meeting. There are no changes to the proposed mapping amendment application. First reading remains in place unless Council rescinds their decision. If approved the GFLUM and LUB mapping amendments are not appealable to the Nova Scotia Utility and Review Board (NSUARB).

Staff are recommending initial consideration of the proposed biochar production facility. If Council gives initial consideration of the substantial development agreement amendment, a public hearing will be scheduled for both the mapping amendments and substantial development agreement amendment. The application for the substantial development agreement amendment for the containerized facility may proceed without the mapping amendments being approved because the land where the containerized facility is to be located is already designated and zoned Industrial Commercial (IC). Amendments to existing development agreements can be appealed to the NSUARB.

A final report on the amendments to the development agreement and amendments to the designation and zone will be presented to PAC prior to the public hearing.

Citizen Engagement

Planning staff will comply with the Citizen Engagement Policies of the Municipal Planning Strategy when processing this application. An advertisement outlining the initial application and indicating that it had been

received and was under review by staff was placed in the *Chronicle Herald* on September 4, 2020. A public information meeting for the initial application was held on December 10, 2020. Due to the change in the application and the amount of time that had passed since the first PIM, a second PIM was held in March 2023 for the updated application. Under the citizen engagement policies, notification is to be mailed to all property owners within 300 m of the subject property. However, as part of the initial application, Council requested that the notification distance be increased to 500 m.

A questionnaire was mailed to all residents within 500 m of the subject properties for the initial application in March 2021. These questionnaire responses have been provided to PAC members. A second questionnaire was mailed to residents within 500 m of the subject lands for the updated application in February 2023. There were 614 questionnaires mailed and 20 questionnaire responses returned. The results of the questionnaires have been provided to PAC members for their consideration.

Meeting notes from the March 7, 2023, public information meeting have been attached as Appendix C.

As part of this staff report, staff have requested authorization to schedule and hold a public hearing. If the motion passes, a letter will be mailed to residents living within 500 m of the subject lands indicating the time, date, and location of the public hearing.

Alternatives

Planning Advisory Committee may recommend that the application not proceed further in which case the application will be deemed refused. Staff do not recommend this approach.

Attachments

Appendix A - Notes from December 1, 2020, Public Information Meeting

Appendix B - Proposed Mapping Amendment Sheets

Appendix C - Notes from the March 7, 2023, Public Information Meeting

Confidential - Questionnaire Results - Initial Questionnaire March 2021

Confidential - Questionnaire Results - Second Questionnaire February 2023

Digital Public Information Meeting - Elmsdale Lumber Company Limited

(December 1, 2020)

- Staff: Mr. John Woodford, Director of Planning & Development
Ms. Debbie Uloth, Project Planner
Ms. Jody MacArthur, Communications Officer
Ms. Sheralee Mitchell-MacEwan, Assistant Municipal Clerk
- Applicant: Mr. Robin Wilbur, President, Elmsdale Lumber Company Limited
Ms. Anneke Santilli, RDA Atlantic Inc.
Mr. Nic Strum, Strum Consulting
Mr. Don Leblanc, RDA Atlantic Inc.
- Call to Order: Mr. John Woodford, Director of Planning & Development
- Presentation: Staff Presentation: Ms. Debbie Uloth, Project Planner
Applicant Presentation: Mr. Robin Wilbur, Elmsdale Lumber Company Limited
Ms. Anneke Santilli, RDA Atlantic Inc.
Mr. Nic Strum, Strum Consulting
Mr. Don Leblanc, RDA Atlantic Inc.
- Applicant:
- Public:
- What type of smells will be produced by the facility? Response: Smell would be similar to the lumber mill.
 - Concerned about the proximity of the biochar facility to the elementary school.
 - Concern that the development will impact property values in the neighbourhood.
 - Will woodchips and sawmill by-products be the only feedstock used in the facility? Response: Yes.
 - Is the operation 24 hours? Response: Yes.
 - Discussion over the types of jobs that could be created by the facility.
 - Discussed the biochar production facility in Poland.
 - Discussed that the school board will be consulted as part of the application.
 - Questions asked regarding an Environmental Assessment. Applicant responded that they had hired Strum Consulting to help determine if an EA is required and to work with Nova Scotia Environment.
 - Discussed some of the technical aspects of the proposed biochar facility.
 - Questions regarding sound that would be produced from the proposed facility.
 - Discussion around the amount of truck traffic generated by the facility.
 - Discussion over the location of the proposed biochar facility.
 - Talked about the uses of biochar and there was a question of whether there were any disadvantages.
 - Questions were asked and answered about the feedstock and where it would come from.
 - Discussed the design of the proposed facility.

Appendix B - Draft Amendment Maps

Draft Amendment Sheet

The Municipality of East Hants
Official Community Plan
Municipal Planning Strategy

Generalized Future Land Use Map 1: South Corridor & Commercial Growth Management Area

The GFLUM designation of a portion of PID 45342938, Elmsdale, shown on the Generalized Future Land Use Map 1: South Corridor & Commercial Growth Management Area, has been changed from the Walkable Comprehensive Development District (WCDD) Designation to the Industrial Commercial (IC) Designation.

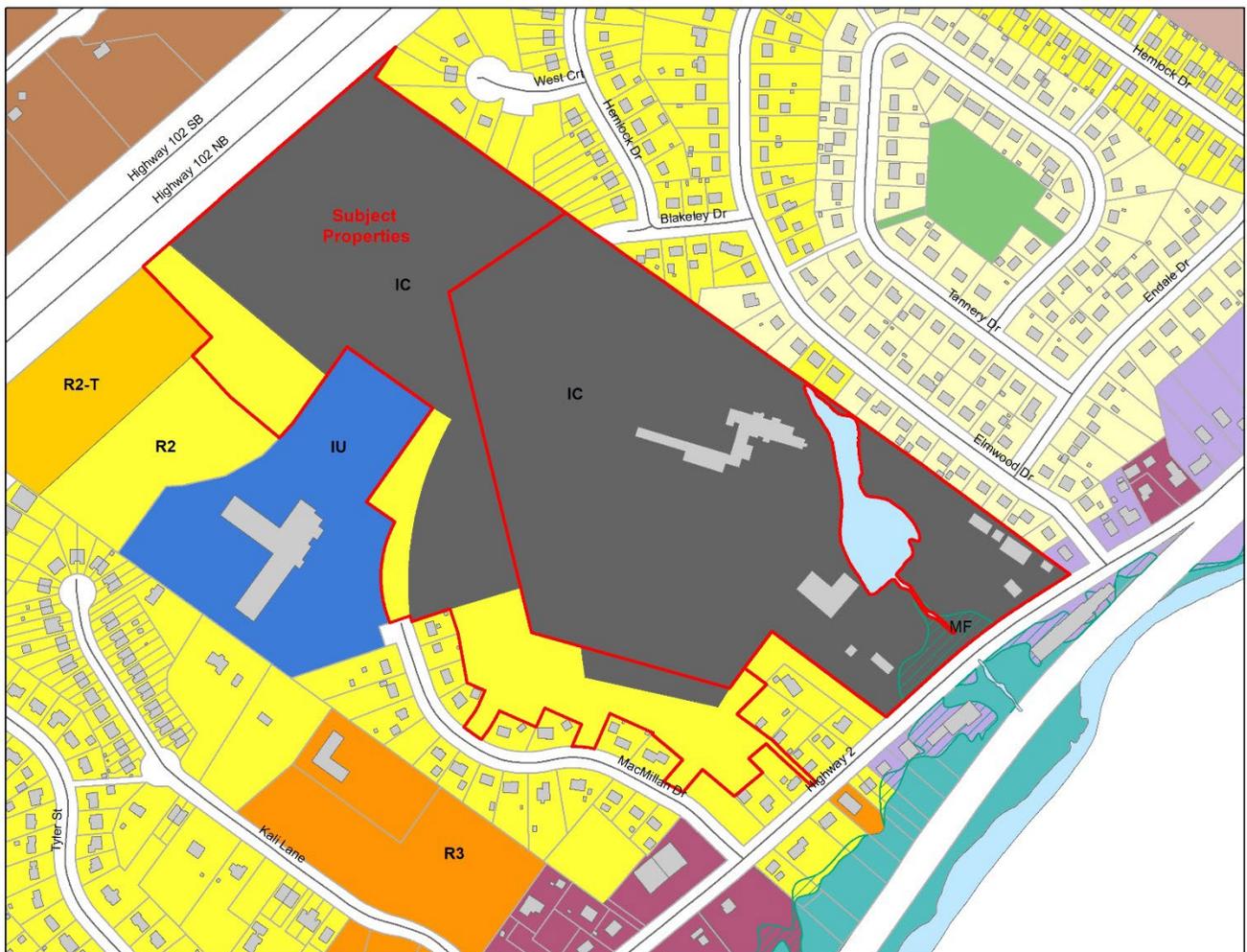


Draft Amendment Sheet

The Municipality of East Hants
Official Community Plan
Land Use Bylaw

Land Use Bylaw Map 1: South Corridor & Commercial Growth Management Area

The LUB zone of a portion of PID 45342938, Elmsdale, shown on Land Use Bylaw Map 1: South Corridor & Commercial Growth Management Area, has been rezoned from Two Dwelling Unit Residential (R2) Zone to the Industrial Commercial (IC) Zone.



Appendix C - Public Information Meeting - March 7, 2023 - Meeting Notes



Public Information Meeting Notes

For PLN20-001 - Elmsdale Lumber Company Limited (ELCO)

Proposed MPS and LUB Mapping Amendments, and substantial amendment to development agreement for containerized biochar.

Meeting Held March 7, 2023

Staff in attendance:

Debbie Uloth, Project Planner (DU)
Rachel Gilbert, Manager of Planning (RG)

Applicant:

Robin Wilbur (RW)
Anneke Santilli (AS)
Don Leblanc (DLB)
India Saunders (IS)

Public In attendance:

Approximately 25 people including Councillors

Questions and Comments:

- What is the woodchip used for now? RW response - woodchip is no longer sent to the paper mill. It's now sent to Shaw plant in Milford.
- Are there any talks about government giving subsidies for carbon offsetting? AS response - this is being worked on.
- RW comment - there are some emissions from this process but they are very low.
- How widespread is biochar production across the world? AS response - we are trying to develop a market. It's a wild west in the market right now. There are different types of biochar but this is unique.
- RW comment - 90% of biochar produced with steam as a by-product.
- Concern about risks associated with biochar production?

- Concern with noise. Can't it be located elsewhere? DLB response - it's close to the feedstock.
- DLB comment - we visited another facility and it was quiet.
- DU comment - air emissions and noise emissions would have to comply with industrial approval limits.
- IS comment - the noise level measured was similar to a vacuum cleaner.
- What are you basing the noise projections on? IS response - the unit in Poland.
- What percentage of woodchips would this smaller unit use? RW response - about 10%.
- What emissions are there? DLB response - wood chips are 50% moisture.
- IS comment - the temps are well below the levels where nitrogen is released and it be stored in the biochar.
- Are there risks from this? AS response - we haven't heard of any issues or lawsuits.
- DLB comment - this is a secondary product of a fuel production plan.
- Any biochar being created in other residential areas? DLB response - in Poland the facility was built in 2018 right in the town.
- Any feedback from the facility in Poland? DLB response - not heard of any issues.
- Will product be sold in bulk? DLB response - will be bagged but not on site. The product will leave the facility in bulk.
- Is there anything on property which would generate similar noise?
- The noise generated from the Elmsdale Lumber site is making people ill.
- Why rezone the land from residential?
- Why is the biochar unit reduced in size?
- DU comment - a larger plant not built in Canada yet and smaller plant enables the details to be scaled up to consider impact.

- RW comment - ELCO was approached because they have most of the feedstock needed for larger biochar facility. An additional 5,000 tonnes will be brought in.
- Concern with existing emissions from ELCO.
- Is the technology being proposed to be used in a different use elsewhere? DLB response - there is another use but the current proposed use has been refined. The technology is known. Purchased the technology and it is being refined.
- Who is developing the filter system? DLB response - it is based on a system in Europe.
- RW comment - the test facility will enable an understanding of the impact.
- Why not create the product off-site? Test it outside the community?
- The public shouldn't be exposed to the noise as a test.
- Who would be testing/monitoring other than Elmsdale Lumber? Applicant comment - there will be an independent review. RW comment - Strum Engineering will be undertaking the testing/monitoring.
- When testing emissions what are you looking for? DU comment - Industrial approval requirement has limits.
- Will it be a continuous feed of stock into the unit? How often will it be fed? DLB comment - it would depend on where the unit was located on site and depends on how big the hopper would be.
- You should change the wording from 'test' to 'demonstrating'.
- Residents wants to feel they have a say on proposal even though the lumber mill has been there a while.
- It its put elsewhere it wouldn't demonstrate that it would or wouldn't work on the Elmsdale Lumber site.
- Does ELCO has a business interest in this? RW response - that is not public information.