Date: 2020-06-17

From: Tyler Jahnke, Director of Operations

Subject  FCM BioGrid Grant

Report No. OPS2020-028

Recommendation

That report OPS2020-028, from Tyler Jahnke, Director of Operations, be received, and

That Council of the Township of Georgian Bluffs authorizes the CAO to secure the FCM grant (Appendix 1), and

That OCWA be authorized to complete the Feasibility study to evaluate the BioGrid facility as outlined in the grant application (Appendix 2), and

That Council of the Township of Georgian Bluffs utilizes the Service Modernization Funding for small and rural communities grant received in 2019 to assist with finding efficiencies to pay for Townships share of $58,769.89

Background

Ontario Clean Water Agency (OCWA) was approached in 2018 to discuss potential options regarding the operation and future of the BioGrid facility in the relation to upgrades and the ability to process and treat source separated organics (SSO). Report No. OPS2019-079 (Appendix 3) was brought to council to approve a joint FCM grant application with OCWA. We have been approved for this 50% grant for a feasibility study. The proposed schedule to complete the detailed feasibility study is 34 weeks.

OPS2020-13 was brought to Council on March 4, 2020. Council requested report to be deferred until a new grant funding deadline could be established. FCM is now requesting an update on the status of this grant.

Analysis

OCWA has recommended that the feasibility study detail the following 6 items:
1. The SSO availability around Grey and Bruce counties and the feasibility of accepting the SSO at the BioGrid;
2. Innovative reception, separation and digestion technologies and retrofit/upgrades required for anaerobic digestion and associated processes;
3. The most beneficial usage of increased bio gas produced, such as electricity generation, upgraded clean fuel and injection into the natural gas pipeline;
4. The current facility tipping fees and present a financial analysis;
5. Review of regulatory landscape, the current market and case studies of similar projects; and
6. The separating of sewage treatment and anaerobic digestion of SSO and other organic wastes resulting in all sewage/septage being disposed of at the existing lagoon.

OCWA’s objective in completing the study is to identify and recommend technically and financially viable approaches to transform the BioGRID facility using innovative technologies to allow for the receipt of additional organics. The transformation would generate more clean fuels and revenue thereby making the BioGRID a sustainable facility.

### Financial Impact

A breakdown of the estimated budget by task is provided below. (From OCWA FCM grant application).

- **Task 1 Funding Application, communication and reporting with FCM and Procurement of sub-consultant:** $4,568.00
- **Task 2 Background Data Review/ Collection and Stakeholder Engagement:** $28,302.50
- **Task 3 Feedstock, Technology Evaluation & Beneficial Use Options:** $39,515.00
- **Task 4 Technical, regulatory and off-take market evaluation:** $44,152.50
- **Task 5 Report (Draft and Final) and Presentation to Council:** $31,447.50
- **Contingency (5%):** $7,399.28
- **Total (excluding HST):** $155,384.78

Town in-kind support (staff time included in Total above): $13,000

OCWA in-kind support (not eligible under funding rules): $24,845.00

Grand Total (excluding HST): $155,384.78

A breakdown of the sources of funding is provided below.

Town in-kind support: $13,000
Total Cash Contribution from Township: $58,769.89
Total Funding Request from FCM (50% of Eligible Cost): $71,769.89

The total cash contribution from Township for the proposed study is estimated at $58,769.89. This could be funded from the Service Modernization Funding for small and rural communities (Ministry of Municipal Affairs and Housing)(Appendix 4).
Correspondence from Ministry of Municipal Affairs and Housing
March 20, 2019 on Service Modernization Funding use;
“While this investment is unconditional, it is intended to help modernize service
delivery and reduce future costs through investments in projects such as: service
delivery reviews, development of shared services agreements, and capital investments.”

**Strategic Priorities**

3.1 Continually strive to reduce environmental footprint by reducing energy
consumption and greenhouse gas emissions to minimize climate change.
   (a) Investigate and pursue opportunities to improve the Biodigester to
   ensure long term sustainability including the acceptance of source
   separated organics and a reduction in operating costs in order to attract
   septage waste.

**Conclusion**

This study aims to determine the optimum technology for upgrading the existing
anaerobic digester to increase on-site renewable energy generation, divert waste from
landfill, produce a valuable agricultural soil amendment and improve overall
performance while decreasing operating costs and improving environmental outcomes.

Without a proper feasibility study on the available material, innovative technologies and
beneficial use of biogas, the BioGRID will not be a position to make informed decisions
pertaining to the future operation, expansion and sustainability.

This feasibility study is well-suited to use the Service Modernization Funding for small
and rural communities to assist with reducing future costs of our capital investment
(BioGrid).

**Supporting Documentation**

Appendix 1 – FCM announcement re grant - Biodigester feasibility study

Appendix 2 – FCM GRANT APPLICATION BIOGRID

Appendix 3 – Report No. OPS2019-79 OCWA Proposal for the completion of a
Feasibility Study for the BIOGRID Facility – Package

Appendix 4 – Report No. OPS2019-51 Ontario Small and Rural Municipality Grant
Funding - Package

Respectfully Submitted:                    Reviewed by:

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Tyler Jahnke. C.Tech, rcji.
Director of Operations

Anne-Marie Shaw.
Interm CAO