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Municipality of Strathroy-Caradoc 52 Frank Street Strathroy, Ontario N7G 2R4

Dear Mayor Grantham and Members of Council:

RE: Mt. Brydges Wastewater Treatment Facility (WWTF) Tender for Extended Aeration; Council Meeting of September 2, 2025, Agenda Item 10.4.2

I virtually attended the Council workshop of August 25 and have reviewed the materials provided, in particular the engineering reports prepared by CIMA+ and Riverbirch. I am familiar with the long history of operational problems at the WWTF and consultant recommendations, including the recommendations of RV Anderson. I am also familiar with publicly available correspondence from the Ontario Ministry of the Environment, Conservation and Parks (MECP) concerning non-compliance of the WWTF. I spent the first decade of my engineering career working in wastewater treatment and have worked at or visited WWTF's across North America, including those with both extended aeration and rotating biological contactor (RBC) processes. As a land developer and concerned ratepayer, I wish to offer the following comments on the proposal to issue a tender to convert the WWTF from an RBC to an extended aeration process.

- 1. The most important objective is to restore the WWTF to compliance with MECP effluent discharge regulations as quickly and efficiently as possible.
- 2. Based on comments made at public meetings by councilors, staff and even consultants, there appears to be a perception that RBC technology is somehow fundamentally inadequate, difficult to maintain and a "band-aid" or temporary solution. This perception is incorrect. There is nothing fundamentally wrong with RBC technology and RBC's have been used since the 1960's at hundreds of plants

without major issues. The technology is well suited to small scale plants, such as the Mount Brydges WWTF. It also seems to be under-appreciated that the Mount Brydges plant operated within effluent discharge limits for many years and it is only recently that operational problems (which have been well documented) and design problems (some of which relate to changing influent conditions) have led to non-compliance. The non-compliance is not due to the technology itself. An improperly operated or designed extended aeration plant could have suffered similar exceedances.

- 3. Riverbirch has been asked at least three times to provide recommendations to restore the plant to compliance, because they are an acknowledged expert in RBC technology. They have a track record of successful design and operation of many such plants across Ontario. They have proposed a cost-effective solution that, most importantly, would restore the plant to compliance within a few months. Despite being recognized experts, their design and operational recommendations have been largely dismissed, mainly due to vague concerns relating to nitrogen treatment, which they have been given inadequate time to publicly address. In fact, nitrification performance is considered a design advantage of RBC's and there are a variety of known approaches to address these concerns, which are not unique to the Mount Brydges WWTF.
- 4. Despite the existence of a low cost solution to quickly restore the plant to compliance at its permitted capacity, there is a recommendation before Council to approve a process change to extended aeration. This process change is unnecessary, costly, will extend the time required to restore compliance, requires additional approval from MECP and introduces uncertainty, as there is no guarantee that construction delays and additional MECP requirements will not negatively impact the timeline.
- 5. There appears to be a belief that the concurrent ECA, recommended in agenda item 10.4.1, will recommend an extended aeration process as a long term solution for future wastewater servicing needs. This is not necessarily the case and, in any event, MECP could reject expansion of the plant at the current location on a landfill site, for a variety of reasons that potentially include the need for leachate treatment in the combined discharge. Such an outcome would render the investment in the current location a waste in the long term. It would be better to fix the current RBC plant at minimal cost and await the outcome of the ECA before investing large sums unnecessarily.
- 6. In view of other current and proposed infrastructure projects, the Municipality also cannot afford an investment of this magnitude. Even if cost is maintained at the projected \$13.7M, given that there are 965 households in Mt. Brydges, the cost per household would be \$14,200. This is simply to repair existing infrastructure, not connect any new households to the system. Information about these proposed costs was only made available to the public on August 25 and very few people are aware

- of the impact. If Council were to propose funding this expenditure by sending a bill to the affected rate payers, rather than by borrowing money and raising taxes over time to cover the cost, there would be public outcry. Council should consider the economic impact on rate payers before approving this unaffordable and unnecessary process change.
- 7. As a developer, the most important thing to justify investment is that there is certainty in the available capacity at the WWTF, without constraints. Suggestions to throttle growth while waiting for the new plant to be completed has a stifling effect on projects with draft plan approval and puts a chill on any new development initiatives. The Municipality should engage with the development community to discuss the impact of major changes to wastewater infrastructure and seek to mitigate the economic impact of delayed or cancelled project investment.
- 8. The Municipality is required to provide three years of capacity at the WWTF. The lack of available capacity means that the Municipality is not in compliance with the Provincial Policy Statement (PPS). Moreover, the provincial imperative is to build more homes faster and delay by the Municipality in restoring the WWTF to compliance makes it unable to secure much needed infrastructure funding. It is short-sighted to approve a process change that will leave the WWTF out of compliance for a longer time and at much greater cost than the Riverbirch solution, particularly given the uncertainty of outcome with the on-going ECA.

For these reasons, I encourage Council to **vote against Agenda item 10.4.2** and instead **instruct staff to engage with Riverbirch** and CIMA+ to re-consider and ultimately implement their RBC solution.

Sincerely,

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Robert A. H. Brunet

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