Stormwater pond plan concern

Good evening, Council Members, fellow community stakeholders, and residents of Ward 7.

My name is Guibin Pan, From Ward 7, and I appreciate the opportunity to speak at today's hearing regarding the proposed high-rise condominium project at 3056 Neyagawa Boulevard.

As a passionate cyclist, I've spent countless hours riding through our community and the Lion Valley Park, which has allowed me to closely observe how the stormwater management system functions, especially during varying weather conditions. Recently, I saw the snowmelt, and it truly made me reflect on the current state of our stormwater infrastructure. The rapid runoff from the melting snow highlighted concerns that have been on my mind, particularly regarding the added stress a new high-rise development could place on our already overburdened system.

I would like to focus on a critical issue with far-reaching implications for our community's safety and long-term sustainability: the proposal's plan to rely on the adjacent Riverbank Way stormwater pond to manage the additional runoff from the development.

According to the Stormwater Management Pond Plan report (SWMPondPlan-S1), the Riverbank Way pond was designed and constructed to meet the specific runoff and storage requirements of its current catchment area. Its design capacity, both in terms of storage volume and peak flow rate, has been calibrated to handle local storm events under existing land uses. For instance, the report indicates that under a standard 100-year storm event, the pond is engineered to safely manage a peak runoff rate of approximately 100 cubic meters per second and has a storage capacity of around 1.2 million cubic meters.

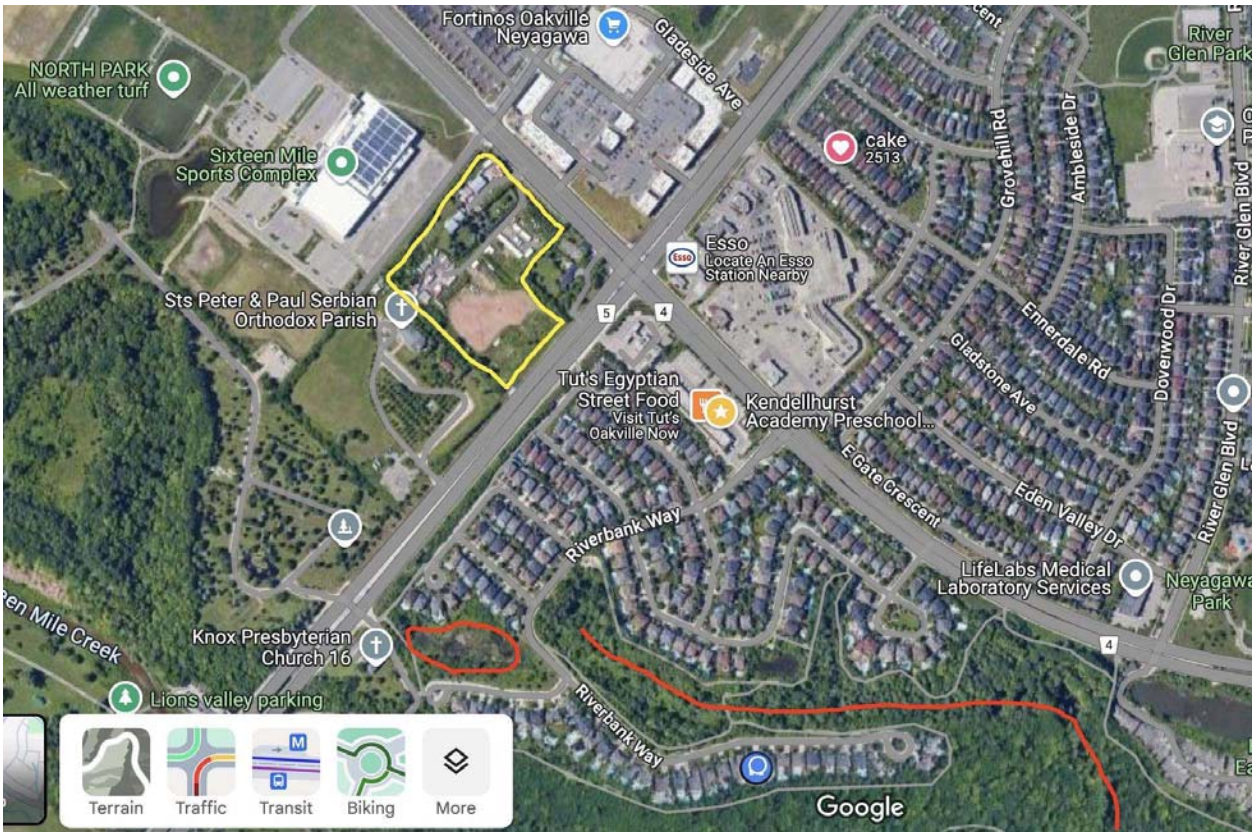
However, the proposed development, due to its increased density and high-rise towers, is expected to generate a significant additional volume of stormwater runoff. The Environmental Implementation Report for Flood and Stormwater Safety (EIRFSS-S1) estimates that during heavy rainfall events, the development could increase the peak runoff by up to 50 cubic meters per second—a 50% increase over the pond's designed peak flow capacity. This additional flow, when combined with the existing inflow, would push the total peak runoff rate to approximately 150 cubic meters per second.

Moreover, analysis from the SWMPondPlan-S1 shows that the pond currently operates at around 80% of its capacity during peak events. With the additional runoff from the development, the overall volume could rise by an estimated 30%. In practical terms, this means that in storm events the pond’s storage might be overwhelmed, leading to frequent overflows. These overflows not only risk damaging adjacent properties but also degrade water quality, as untreated stormwater can carry pollutants into our local waterways.

Beyond the numerical discrepancies, there is a broader concern here: by attempting to “borrow” the capacity of a facility designed for a different, less intense land use, we are compromising a critical piece of our municipal infrastructure. The stormwater pond at Riverbank Way is a public asset, designed with precise safety margins to protect our community from flooding and to maintain water quality. Using it as a catch-all solution for the additional runoff from a high-rise development not only violates the principles of sound engineering but also imposes an unfair burden on an adjacent community resource.

In summary, the data clearly show that the current proposal's reliance on the Riverbank Way stormwater pond as a catch-all solution for additional runoff is neither sustainable nor responsible. The additional 50 cubic meters per second of runoff during peak events and the expected 30% increase in storage volume far exceed the safe operating limits of the pond. This approach jeopardizes flood control, compromises environmental standards, and could ultima stormwater pond as a mitigation measure for this development. We urge the Council to require that the developer adopt alternative, properly engineered stormwater management solutions that do not rely on overstretched community assets. Our community’s safety and our commitment to sustainable development demand nothing less.

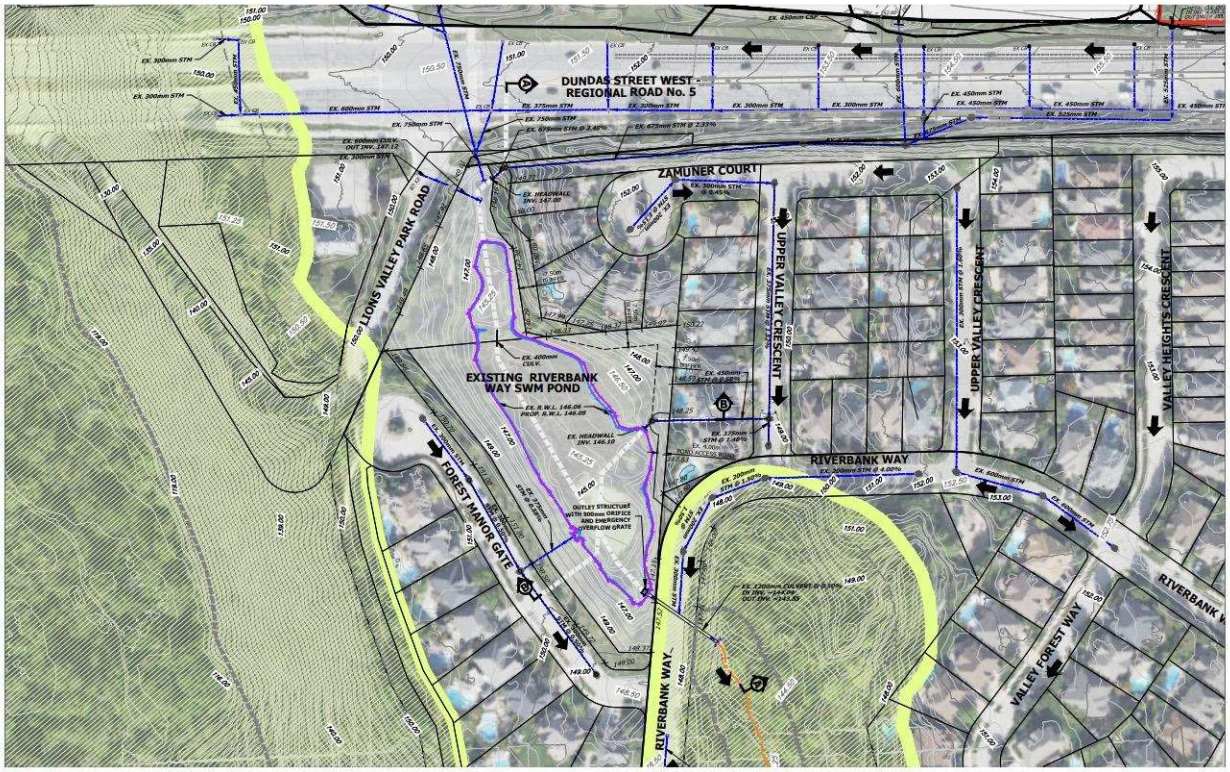
Thank you for your attention. I look forward to your thoughtful consideration and to working together to safeguard our community’s future.



Speech Draft based on the Following research:

Wyfq mwmsr$5$$Irzmsrq irxep$Mq tpiq irxexmsr$VitsvxerhJyrgxmsrep$ Wivzmgmrk$Wxyh}$$Higiq fiv$6468 ,thj-

https://www.oakville.ca/getmedia/0751e1f5-cb1d-4554-aa2b-25e271e9fbbb/da-132102-EIRFSS-S1.pdf



Wyfq mwmsr$5$1$Wxsvq{exiv$Tsrh$Tper$1$Higiq fiv$6468 ,thj-

https://www.oakville.ca/getmedia/0a8915c4-cdfa-4942-82f0-cee4a4ad5891/da-132102-SWMPondPlan-S1.pdf

Summary of the Reports

Flood & Stormwater Safety Report (EIRFSS, Part S1):

- **Objective:** Evaluate the impact of the proposed high-density development on stormwater runoff and flood risk.
- **Key Findings:**
  - The development is projected to increase impervious surfaces significantly, which will boost peak runoff rates during heavy rainfall.

    - Under a design storm event, the additional runoff could exceed the existing capacity of the stormwater management facilities.
    - Detailed modeling indicates that the proposed mitigation measures, including borrowing capacity from an adjacent stormwater pond, may not suffice under extreme conditions.

EIRFSS Drawings & Figures:

- **Content:** Provide detailed layouts and design modifications for stormwater conveyance, storage, and treatment systems.
- **Key Details:**
    - The drawings show proposed configurations for runoff channels, detention areas, and critical control points.
    - The figures illustrate how increased runoff from the proposed development could overwhelm the designed system, particularly during peak storm events.

Environmental Site Assessment (ESA) Phase 1 & Phase 2:

- **Objective:** Assess the current environmental conditions of the project site, including natural features and potential contamination issues.
- **Key Findings:**
    - Sensitive ecological areas are identified that may be adversely affected by increased stormwater flows.
    - The assessments underline the importance of preserving water quality and the surrounding natural heritage, which could be compromised by excessive runoff.

Stormwater Management Pond Plan (SWMPondPlan):

- **Objective:** Outline the design and operational parameters for the stormwater management pond adjacent to the project site.
- **Key Details:**
    - The pond's capacity and design criteria are based on the existing land use.
    - The plan indicates that the pond is designed for a certain peak flow rate and storage volume that may not accommodate the additional load from the new development.

Counter-Arguments to Refute the Project's Justification

1. **Inadequate Stormwater Management Capacity:**
    - **Data Insight:** The EIRFSS report indicates that the development could add up to a 50% increase in peak runoff, while the SWMPondPlan shows that the adjacent pond is already near its designed capacity.
    - **Argument:** Relying on the existing pond to handle this extra load is unrealistic. The proposed mitigation measures do not provide the necessary safety margins, posing a serious risk of overflow and flooding.
2. **Increased Flood Risk and Environmental Impact:**
    - **Data Insight:** The modeling in the EIRFSS Figures highlights that under heavy storm events, the system may be overwhelmed, leading to frequent overflows.
    - **Argument:** Such overflows can cause water quality degradation and harm nearby sensitive ecological areas, as noted in the ESA reports. This not only endangers public health but also undermines community sustainability efforts.
3. **Economic Burden on the Community:**
    - **Data Insight:** The anticipated shortfall in stormwater management capacity would require costly retrofits or emergency mitigation measures post-development.
    - **Argument:** The financial burden of upgrading or expanding the stormwater system would fall on the taxpayers, increasing the overall cost to the community and diverting funds from other essential services.
4. **Unsustainable Development Precedent:**
    - **Data Insight:** The combined findings from the EIRFSS, ESA, and SWMPondPlan reports provide clear evidence that the current design significantly exceeds the safe operational limits for stormwater management.
    - **Argument:** Approving a project that pushes these limits sets a dangerous precedent for future developments. It risks transforming our community into an area where public assets are constantly stressed, undermining long-term livability and resilience.

Conclusion

In summary, the reports provide robust, data-backed evidence that the proposed high-rise condominium project will lead to a substantial increase in stormwater runoff—far exceeding the designed capacity of the adjacent stormwater management pond. This creates a heightened flood risk, environmental degradation, and significant economic burdens on the Town of Oakville. We urge the Council to consider these findings

carefully and to reject or substantially modify the project to ensure that any future development aligns with sustainable and safe stormwater management practices.