March 26, 2019

- TO: The Mayor and Councillors Corporation of the Township of Uxbridge 51 Toronto Street South P.O. Box 190 Uxbridge, Ontario L9P 1T1
- CC: Debbie Leroux, Director of Legislative Services Phil Alexander, Uxbridge Fire Chief Brian Pigozzo, Chief Building Official

SUBJECT: Grainboys Zoning Application – Fire Risks and Fire Suppression

Dear Mayor and Council:

I am writing to document new Fire Risks and Fire Suppression concerns I have in relation to the Zoning Application of Grainboys Holdings Inc. Part of Lot 17, Concession 3, 351 Regional Highway 47, Township of Uxbridge. I do not believe these potential building risks of a hazardous industrial milling operation have been raised or adequately addressed in the numerous reports and public consultations:

## A New and Unusual High Fire Risk for Uxbridge

Grainboys has stated on their website that they offer Stone Ground Flour as a milling process. Seven of the grains they process are on the US Occupational Safety and Health Administrations list of dangerous "Combustible Dusts". Facilities with this hazard are at a significantly higher risk of fire, explosion, property loss and loss of life. Therefore, to protect the public, more stringent requirements are required in the i) Ontario Building, ii) Fire and iii) Electrical codes (e.g. explosion proof conduits and fixtures). The Ontario Electrical Safety Code (OESC) would likely classify the operation as a:

**Class II Hazardous Location:** Rule 18-002 of the OESC defines locations where <u>explosive dust</u> may be present, based on likelihood and duration, as Zone 20, Zone 21 and Zone 22. Locations where dust may be suspended in the air to the extent that explosive concentrations may be present, as defined by the Zone descriptions, include; <u>grain elevators; flour mills; feed grinding and mixing plants;</u> coal pulverizing plants; starch plants; magnesium processing plants, etc.

Under the Ontario Building Code, this facility would likely be classified as a:

*High Hazard Industrial Occupancy* (Group F, Division 1) means an industrial occupancy containing sufficient quantities of <u>highly combustible</u> and flammable or <u>explosive materials</u> which, because of their inherent characteristics, constitute a <u>special fire hazard</u>.

To date, it has not been revealed what the Hazardous Building Classification level is for the applicant's existing operation in Aurora, and what the classification level would be for the proposed new location.

## **Questionable Fire Suppression**

Heightening the impact of this unusual, higher fire risk is questionable fire suppression resources and capability in Goodwood. The stated response time from the Volunteer Uxbridge Fire Department is in excess of 13 minutes and response time from neighbouring Stouffville relief it is over 12 minutes. Once on-site at the proposed mill, there is no pressurized hydrant capability anywhere in Goodwood proper. Water has to be either tanked in, or a sufficient store made available on-site with a dry hydrant. Neither Uxbridge or Stouffville has an accredited Tanker Shuttle Service rated for Commercial/Industrial fires (a much higher flow volume requirement that residential accreditation). This is why the industrial park in Uxbridge at York/Durham 30 was appropriately planned with a water tower and pressurized hydrants. This 300+ acre site with many large scale and diverse industries (including a massive lumber yard) actually has a lower fire risk rating (per the Uxbridge Official Fire Plan) than Goodwood (with no water supply).

The applicants planning justification report cites a Storm Water Report with designs for a SWM - Storm Water Management pond with firefighting water storage. The design of this pond is on very thin margins of acceptability (<5%) for minimum firefighting quantity (750 m<sup>3</sup>) as it has to also meet the surface area required to be less than 50% maximum site disturbance limits of the site per the ORMCP. With increasing extreme climate events which include longer periods of drought and extreme cold periods, dependence on storm water pond quantity is becoming increasingly tenuous due to evaporation and thicker surface ice levels. (This was noted in the AECOM peer review). There is no mention how storm water pond levels will be artificially replenished if required.

There is no mention in any of the planning submission reports of building sprinkler requirements, on-site water pressure and flow volume capability, or backup generator power supply for on-site fire suppression. (The whole site is planned to be serviced by a single existing 4" residential well).

Good, responsible planning has to be more than meeting zoning and environmental statutes. Public safety should trump all other planning decisions: This has been woefully overlooked with the intense focus on only compliance to zoning and environmental planning sensitivities.

Given this concern, I therefore ask Council to determine and make public, both the Hazardous Building Classification of the applicant's existing operation and the expected classification of the new proposed operation in Goodwood. If this operation is indeed classified at the highest hazard level in the Ontario Building Code, then this is a material

consideration in deciding to approve the application so close to a residential neighbourhood, an elementary school and our places of worship.

I would then further ask Council to have the Uxbridge Fire Department provide a response to the Fire Suppression concerns I have outlined, in light of new Hazardous Building Classification information with respect to the proposed location. This response should include what, if any, changes are required to the Uxbridge Official Fire Plan, and any new training, equipment, personnel or other items for the Fire Department that needs to be considered and budgeted for, to address this New and Unusual High Fire Risk Location in Uxbridge. A response from the Chief Building Official of Uxbridge is also required with respect to any additional zoning, design and construction constraints the Ontario Building Code places on the Hazardous Building with respect to the planned location.

If, however, the mill's operation is found and deemed to be a regular building classification, we can all rest assured that we been diligent and served the public well with respect to the public's safety.

Regards,

David O'Leary Hamlet of Goodwood, ON 647-722-5428