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UNIVERSITY OF WISCONSIN-MADISON

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September 21, 2015

RE: Request for Review of CUP #2103

Dear County Supervisor Salov:

As a lifelong member of St. Paul's Liberty Lutheran Church, as well as being the co-director of the adjacent cemetery, I am concerned about possible damage to the church and the surrounding monuments due to the blasting that is ongoing at the Oak Park Quarry.

The fact that Liberty Church was constructed in 1851 (using limestone and mortar) and noting that the structure is higher than a typical two-story building and has a number of wide-span, stained-glass windows, suggests that this historic site is extremely vulnerable to the effects of blasting, i.e., both ground vibrations and airblasts.

Having read the current CUP for the Oak Park Quarry (i.e., CUP #2103), I have noted that Item #3 on the Conditions of the permit states:

"The applicant shall apply for and receive all other local, state and federal permits."

I am concerned that the operator of Oak Park Quarry is not complying with local permit requirements. Earlier in 2015, the Town of Deerfield approved and published Ordinances #2015-01 and #2015-02, which require blasting companies and mineral operators to obtain licenses in order to conduct mineral extraction activities. In addition, Ordinance #2015-02 requires mineral extraction operators to conduct blasting at a lower Peak Particle Velocity (PPV), i.e., lower than the State adopted standards. The ordinance also limits the frequency of the ground vibrations due to blasting and restricts the maximum allowable overpressure from an airblast, both requirements being more stringent than the State regulations.

I would like to request copies of all local, state and federal permits that been applied for and granted to allow drilling and blasting at the Oak Park Quarry under CUP #2103, since it appears that neither the blasting company nor the mineral extraction operator have obtained licensing from the Town of Deerfield.

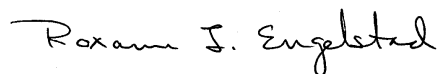
Moreover, blasting reports from July of 2015 to date show numerous violations of Ordinance #2015-02, particularly in terms of the PPV, the frequency of the ground vibrations, and the maximum allowable overpressure. It appears as if no citations have been issued for these violations. Complete blasting reports can be obtained from Ahlgrimm Explosives in Appleton, WI, the blasting company being used by the operator of the Oak Park Quarry.

Recently the Oak Park Quarry added an alternative driveway for quarry operations. I would like to request copies of the driveway application and permit from the township, including how this permit was approved. The Town of Deerfield does have an ordinance in place (i.e., Ordinance #2003-1) to regulate the construction of driveways. This ordinance requires that any proposed driveway construction (along with an erosion control plan) be presented to the Town Board prior to the issuance of a driveway permit. I would like to request a copy of the proposal (with erosion plan) for the Oak Park Quarry driveway that was presented to the Town Board.

I am truly concerned about the adverse effects that the blasting will have on the historic buildings and structures located in close proximity to the quarry. In fact, for building and structures with a greater potential damage from vibration, blasters will often follow the guidelines of the Federal Transit Administration (FTA), which specifies a maximum PPV of 0.12, which is much lower than the local ordinance of 0.30.

I would like the County Staff to review this operation to see if the operator is in compliance with the Conditions of CUP #2103. Thank you for your consideration.

Sincerely,

A handwritten signature in cursive script that reads "Roxann L. Engelstad".

Dr. Roxann L. Engelstad
Consultant for St. Paul's Liberty Lutheran Church
Professor of Mechanical Engineering
UW-Madison

xc: Mr. Roger Lane, Dane County Zoning Administrator
Mr. Todd Violante, Director, Dane County Planning & Development Department