

EXHIBIT F

January 31, 2017

PH 231.946.5874

FAX 231.946.3703

Gordon Hayward
Director of Planning & Zoning
13235 Center Road
Traverse City, MI 49686
planner@peninsulatownship.com

WWW.GFA.TC

RE: The 81 on East Bay
Review of Site Environmental Concerns

Dear Gordon:

As requested we have completed our initial investigation of site environmental concerns as it relates to the The 81 on East Bay project. The court judgement from Judge Rodgers in early 2016 remanded to the Township Board for additional review to determine whether Township standards for erosion control, grading and storm water are satisfied.

Following this, through our requests for additional grading information and follow up engineering reviews, we had found that the grading plans, private road designs, and storm water management systems are in conformance with Township Standards and Ordinances for engineering design purposes. However, after the November 2016 public hearing for the project, the scope of our review was expanded due to concerns expressed regarding past use of agricultural chemicals (pesticides, fertilizers, etc.) on the site and whether site grading for the project as proposed create an adverse impact as it relates to residuals from this past chemical use.

As a result, over the past weeks we have begun to research the history and past use of the property, contacted past owners and farmers with direct knowledge of the previous farming operations, and relevant State of Michigan environmental regulations as it pertains to agricultural chemicals and responsibilities of property owners following their past use. As a general note, this past agricultural use and chemical applications appear to have been decades prior to the Michigan Right to Farm Act (Act 93 of 1981) and its provisions and exemptions related to agricultural chemical use.

During the public hearings, it is our recollection that the major chemical components which may exist on the property from past farming activities include lead and arsenic. It appears that past farming and orchard use was primarily conducted in the lower lying, non-forested areas to the north of Boursaw Road. In general the site topography grades toward the south and center of the property, with a small area of low lying wetland just to the north of Boursaw Road. As a result, through existing drainage patterns chemical residuals such as lead and arsenic seem likely to have remained on the site with potentially higher concentrations near the wetland and other lower lying areas of the site.

Through our effort to obtain more specific information, we contacted Tim Boursaw, whose family owned the property and oversaw farming operations for several decades up until approximately the late 1970's. Mr. Boursaw indicated that past agriculture on the site has been extensive and diverse ranging from maple syrup operations, livestock, and potatoes in the earlier years to apple and cherry orchards later. He indicated that through the years chemical applications

Gordon Hayward
The 81 on East Bay
January 31, 2017

Page 2

would have included, but not limited to, lead, arsenic, other heavy metals and parathion pesticides.

Mr. Boursaw also indicated that during the late 1970's, the farming on the property was transferred to the Weatherholt Family who continued the orchard operations into the early 1980's. In follow up, we contacted David Weatherholt to discuss his knowledge of the site. Mr. Weatherholt's comments confirmed those from Mr. Boursaw. In addition, Mr. Weatherholt stated that past chemical applications at the site also may have included pesticides DDT, Pennacap-M (methyl parathion), fungicides, as well as the chemical alar (daminozide) which is a plant growth regulator commonly used during that period.

After our discussions with the past owners and farm operators of the property, we reviewed State of Michigan Department of Environmental Quality (MDEQ) documents pertaining to Part 201 (Environmental Remediation) of Act 451 of 1994, as it relates to the agricultural chemicals and possible references to hazardous substances. We found that several of the identified chemicals including lead, arsenic, DDT, and methyl parathion are included in the MDEQ list of substances with generic clean up criteria and screening levels (see attached Table 2. Soil: Residential Part 201 Generic Cleanup Criteria and Screening Levels/Part 213 Risk-Based Screening Levels).

Further, it is our understanding from Part 201 that potential new property owners or operators are obligated to conduct all appropriate inquiry (commonly referred to as 'due diligence') to evaluate whether environmental contamination is potentially present on a piece of property. Initial steps generally include inquiring with past owners or operators about known environmental conditions, with next steps potentially being to conduct an environmental assessment of the property using the Federal All Appropriate Inquiry (AAI) or the American Society of Testing Methods (ASTM) Phase I Environmental Assessment process.

In our opinion, the mass grading operations being proposed for the project, while adequately designed from erosion control and storm water management standpoints, do have the potential to relocate and redistribute possibly contaminated soil materials on the site. Such activity may be an exacerbation of the existing conditions, an adverse impact, and may violate rules under MDEQ Part 201.

As a result, based upon our initial investigation, it is recommended that an environmental assessment in accordance with the above referenced standards (AAI or Phase I) be conducted by an environmental professional prior to site construction. Such an assessment will confirm whether the property is contaminated at levels exceeding MDEQ requirements and whether there are environmental 'due care' obligations under Part 201 to be met during the site construction process.

Please do not hesitate to contact me with any questions regarding this matter or if we can be of further assistance.

Respectfully Submitted,
GOURDIE-FRASER

Brian M. Boals, PE
Project Manager