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July 27, 2018

Kristen Kapelanski Department of Planning and Economic Development **City of Rochester Hills** 1000 Rochester Hills Drive Rochester Hills, MI 48309-3033

## Subject: File No. 18-008 Breckenridge Condominiums; Wetland Use Permit Review #3; Plans received by the City of Rochester Hills on July 24, 2018

# Applicant: Hamliv, LLC d/b/a Breckenridge Condominiums

Dear Ms. Kapelanski:

The above referenced project proposes to construct 12 residential units on two parcels totaling approximately 3.73 acres of land. The site is located in the southwest quadrant of the intersection of Hamlin Road and Livernois Road. The subject site includes wetland regulated by the City of Rochester Hills.

ASTI has reviewed the site plans received by the City on July 24, 2018 (Current Plans) for conformance to the Wetland and Watercourse Protection Ordinance and the Natural Features Setback Ordinance and offers the following comments for your consideration.

## COMMENTS

- 1. **Applicability of Chapter (§126-500).** The Wetland and Watercourse Protection Ordinance is applicable to the subject site because the subject site is not included within a site plan which has received final approval, or a preliminary subdivision plat which received approval prior to January 17, 1990, which approval remains in effect and in good standing and the proposed activity has not been previously authorized.
- 2. Wetland and Watercourse Determinations (§126-531). This Section lists specific requirements for completion of a Wetland and Watercourse Boundary Determination.
  - a. This review has been undertaken in the context of a Wetland and Watercourse Boundary Determination completed on the site by the Applicant's wetland consultant, Holloway EPI, on August 1, 2017. ASTI confirmed this wetland delineation in the field on August 30, 2017; ASTI also added four wetland flags to the wetland delineation in the field.

Portions of two City-regulated wetlands are proposed to be impacted by this project; Wetland A in the central portion of the site, and Wetland B in the southeastern portion of the site. One wetland not regulated by the City (Wetland C), which is also proposed to be impacted, is located in the east-central portion of the site.

All wetland flagging is shown on the Current Plans to ASTI's satisfaction.

#### Wetland Quality Assessments

Wetland A is a scrub/shrub and young forested wetland that exhibited approximately 50% canopy and is comprised of vegetation of generally low ecological floristic quality. The portion of Wetland A proposed for impact in the southwest portion of the site (at the proposed Unit 5 on the Current Plans) exhibits vegetation dominated by the invasive species European buckthorn (Rhamnus cathartica) and common reed (Phragmites australis). Mean vegetation cover was estimated at approximately 85% with an approximate total native species cover of less than 5% and approximate invasive species cover of 80%. This portion of Wetland A appears to detain small amounts of water during seasonal high precipitation periods. Soils were comprised of sandy loams and appeared to be disturbed by historical agricultural activities, i.e., former crop rows, but appear to have been undisturbed since approximately 1997 based on historical aerial photography review. Therefore, it is ASTI's opinion that the area of Wetland A to be impacted is of low guality and is not a high guality natural resource of the City per the City's Wetland and Watercourse Protection Ordinance. The remaining portion of Wetland A exhibited an approximate 50/50 mix of the invasive species of European buckthorn and Phragmites and the native species of cottonwood (Populus deltoides), and green ash (Fraxinus pennsylvanica). The remaining portion of Wetland A exhibited similar soils and hydrological characteristics. It is ASTI's opinion that the remaining portion of Wetland A is also of low ecological quality.

The portion of Wetland B proposed for impact (at the proposed Units 9 and 10), is a scrub/shrub wetland that exhibits vegetation similar to Wetland A. This area is largely dominated by the invasive species European buckthorn and contains supporting common native species of gray dogwood (*Cornus racemosa*), green ash saplings, and American elm saplings (*Ulmus americana*). The herbaceous layer is sparse and exhibited common native species of poison ivy (*Toxicodendron radicans*) and agrimony (*Agrimonia parviflora*). Mean vegetation cover was estimated at approximately 90% with approximate native species cover approximated at 20% and approximate invasive species cover at approximately 70%. This portion of Wetland B slows water infiltration rates during wet periods, but does not appear to be consistently inundated or saturated at the surface. Shrub canopy coverage was approximately 60% and was comprised of vegetation of average to low ecological floristic quality. Similar to Wetland A, Wetland B soils were comprised of sandy loams and appeared to be disturbed by historical agricultural activities. Therefore, it

is ASTI's opinion that the portion of Wetland B proposed to be impacted is of low ecological quality and is not a high quality natural resource of the City per the City's Wetland and Watercourse Protection Ordinance. The remaining portion of Wetland B exhibited similar ecological characteristics and it is ASTI's opinion the whole of Wetland B is of low quality.

Wetland C is a small wetland in the central portion of the site. Wetland C exhibited similar ecological conditions as Wetland B and, therefore, it is ASTI's opinion the Wetland C is of low ecological quality, is not a high quality natural resource of the City, per the City's Wetland and Watercourse Protection Ordinance, and is not regulated by the City.

- 3. Use Permit Required (§126-561). This Section establishes general parameters for activity requiring permits, as well as limitations on nonconforming activity. This review of the Current Plans has been undertaken in the context of those general parameters, as well as the specific requirements listed below.
  - a. On-site wetland appears to be shown accurately per on the Current Plans. Plans show all alpha-numeric wetland flagging as applied in the field including the additional wetland flagging applied to the site by ASTI.
  - b. The Current Plans show 1,343 square feet (0.031 acres) of permanent impacts will result to Wetland B from the construction of a storm water detention basin in the northwest portion of the site.

This action would qualify for an exception to the Wetland and Watercourse Protection ordinance provided that: (1) a prior written notice is given to the City Engineer and written consent is obtained from the City Mayor prior to work commencing; (2) the work is conducted using best management practices (BMPs) to ensure flow and circulation patterns and chemical and biological characteristics of wetlands are not impacted; and (3) such that all impacts to the aquatic environment are minimized. These impacts are shown on the Current Plans to ASTI's satisfaction.

c. The Current Plans show 4,224 square feet (0.097 acres) of permanent impacts will result to Wetland B from the construction of a portion of Units 9 and 10 and associated grading. Wetland B is of low ecological quality and the proposed impacts are minor. Moreover, these impacts as proposed will not necessarily compromise the functions of Wetland B in this area or in its entirety. Therefore, ASTI recommends the City allow for a Wetland Use Permit for the impacts proposed to Wetland B in this area. These wetland impacts are shown on the Current Plans to ASTI's satisfaction.

The Current Plans also show a proposed 1'-2' high boulder retaining wall along the western portion of Wetland B to be impacted. This structure should prevent unforeseen potential impacts from occurring to Wetland B by providing a permanent barrier to development and is in harmony with the City's Wetland and Watercourse Protection Ordinance, which is to ASTI's satisfaction.

d. The Current Plans show 4,194 square feet (0.096 acres) of permanent impacts will result to Wetland A from the construction of Unit 5 and from grading activities in proposed lawn areas associated with Units 5, 6, 7, and 8. These impacts as proposed will not necessarily compromise the functions of Wetland A in this area or in its entirety. Therefore, ASTI recommends the City allow for a Wetland Use Permit for the impacts proposed to Wetland A in this area. These wetland impacts are shown on the Current Plans to ASTI's satisfaction.

The Current Plans also show a proposed 1'-2' high boulder retaining wall along the portion of Wetland A to be impacted. This structure should prevent unforeseen potential impacts from occurring to Wetland A by providing a permanent barrier to development and is in harmony with the City's Wetland and Watercourse Protection Ordinance, which is to ASTI's satisfaction.

- 4. Use Permit Approval Criteria (§126-565). This Section lists criteria that shall govern the approval or denial of an application for a Wetland Use Permit. The following items must be addressed on a revised and dated Wetland Use Permit application and additional documentation submitted for further review:
  - a. The applicant has supplied the City with a letter from the DEQ stating no DEQregulated wetlands exist on-site. Therefore, a DEQ Part 303 permit for the proposed project will not be required. However, Wetlands A and B are regulated by the City and impacts to these wetlands as proposed require a Wetland Use Permit from the City. Wetland C is not regulated by the City and thus, a Wetland Use Permit is not required for the project as shown on the Current Plans.
- 5. **Natural Features Setback (§21.23).** This Section establishes the general requirements for Natural Features Setbacks and the review criteria for setback reductions and modifications.
  - a. The Current Plans indicate all Natural Features Setback areas on-site will be permanently impacted (812 linear feet).
  - b. The Current Plans indicate that approximately 200 linear feet of Natural Features Setback will be permanently impacted from the construction of the proposed detention basin in the northwest portion of the site. This action would qualify for an exception to the Natural Features Setback ordinance provided that: (1) a prior

written notice is given to the City Engineer and written consent is obtained from the City Mayor prior to work commencing; (2) the work is conducted using best management practices (BMPs) to ensure flow and circulation patterns and chemical and biological characteristics of wetlands are not impacted; and (3) such that all impacts to the aquatic environment are minimized.

The Current Plans also show a 1-2 feet high boulder wall barrier will be constructed along the western and southern portion of the detention pond. This barrier should help ensure no further wetland impacts to Wetland B occur in the area associated with the detention basin. This is to ASTI's satisfaction.

c. The remaining approximately 612 linear feet of Natural Features Setback are proposed to be permanently impacted from the proposed site development. The onsite Natural Features Setback was comprised of old-field scrub/shrub to herbaceous old-field and was dominated by common vegetation including invasive species such as European buckthorn, Russian olive (*Elaeagnus angustifolia*), Siberian elm saplings (*Ulmus pumila*), smooth crabgrass (*Digitaria ischaemum*), and mustard garlic (*Allaria petiolata*) and native species such as gray dogwood, annual grass (*Poa annua*), smooth brome (*Bromus inermis*), wild crab apple (*Malus coronaria*), and crab grass. Total shrub canopy was approximately 70% in the old- field scrub/shrub area and herbaceous cover was 100% in the herbaceous old-field portion. As a whole, the entire on-site Natural Features Setback in this area is of poor floristic quality and is comprised of at least 50% or more of invasive species, offering minimal buffer quality to on-site wetland.

Previous plans were not harmonious with the City's Natural Features Setback Ordinance which states "... a minimum setback of 25 feet from a natural feature, as defined in this ordinance, shall be observed, and any filling, land balancing, dredging, construction or any deposit, installation or removal of any material, including structures, soils, minerals, and/or vegetation, within Natural Feature Setback is prohibited. Any land located within Natural Features Setback is intended to be kept in a natural state" (§138-9.102).

ASTI recommended in previous reviews that the applicant provide protection to the remaining City-regulated wetland and Natural Features Setback on-site. This protection was recommended to be in the form of a permanent protective barrier that is not easily removed, which should protect the wetland from potential unintended impacts; specifically south of the proposed Units 5, 6, 7, and 8 and west of Unit 8 and the proposed Vail Drive. An option supplied to the Applicant was a 1-2' boulder wall in these areas, such as the proposed boulder wall associated with the detention basin.



The Current Plans now show a permanent protective barrier to all remaining areas of Natural Features Setback and on-site wetland in the form of a proposed 1-2' high boulder retaining wall. This is in harmony with the City's natural Features Setback ordinance and is to ASTI's satisfaction.

### RECOMMENDATION

ASTI recommends the City approve the Current Plans.

Respectfully submitted,

## **ASTI ENVIRONMENTAL**

Kyle Hottinger Wetland Ecologist Professional Wetland Scientist #2927

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