

March 19, 2020

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

**Subject: File No. 20-003 Auburn Pharmaceutical;
Wetland Use Permit Review #2;
Plans received by the City of Rochester Hills on
March 11, 2020
ASTI File No. 9675-94**

Applicant: General Development c/o Teresa Bruce

Dear Ms. Kapelanski:

The above referenced project proposes to construct a commercial building on approximately 9.6 acres of land located along Rochester Industrial Drive, north of Hamlin Road, and west of Livernois Road.

ASTI has reviewed the site plans received by the City on March 11, 2020 (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. ASTI confirmed this wetland delineation in the field on February 3, 2020.

One wetland and one watercourse were identified on the property, both of which are regulated by the City and likely the Michigan Department of Environment, Great Lakes, and Energy (EGLE). No wetland impacts are proposed on the Current Plans.

Wetland and Watercourse Assessments

One wetland and one watercourse were observed on the property. Quality assessments are as follows:

On-Site Wetland

The on-site wetland, which is located within the western portion of the Property, is an emergent and forested wetland. Vegetation within the emergent portion was dominated by the invasive species reed canary grass (*Phalaris arundinacea*), with supporting species such as the invasive species narrow-leaved cattail (*Typha angustifolia*) and the native species late goldenrod (*Solidago gigantea*). Vegetation within the shrub layer, which exhibited a cover of approximately 25%, was dominated by the common native species green ash (*Fraxinus pennsylvanica*) and the invasive species glossy buckthorn (*Frangula alnus*), generally in equal amounts. The tree layer within the emergent portion was mainly comprise of dead green ash and was sparse.

Vegetation within the forested portion of the on-site wetland was dominated by young trees (approximately 10-15 years old) of the common native species green ash and American elm (*Ulmus americana*), with minor inclusions of the common native species of green hawthorn (*Crataegus mollis*); the tree canopy coverage was estimated to be approximately 60-70%. The shrub layer within the forested portion of the on-site wetland was dominated by the invasive species glossy buckthorn and the common native species green ash and American elm, all with generally equal distribution. The herbaceous layer of the forested portion of the on-site wetland was sparse at the time of the site inspection and was dominated by the common native species poison ivy (*Toxicodendron radicans*).

Wetland soils were comprised of sandy clay loams and appeared to be relatively undisturbed since approximately 1990 based on historical aerial photography review. The on-site wetland appears to be the result of natural wetland reclamation from former agricultural activities on the site prior to 1990. The herbaceous vegetation within the on-site wetland is dominated by invasive species (approximately 95%) and the woody vegetation is dominated by native

species (approximately 60%) with significant invasive species inclusions (approximately 40%), thus, the on-site wetland is of low floristic quality. However, the on-site wetland actively receives storm water and natural flow from the southeast via a storm water sewer system on the south side of Rochester Industrial Drive, thereby providing direct water filtration and flow reduction and/or detainment, prior to entering the Clinton River to the west. The Clinton River is the largest watercourse within the City of Rochester Hills and is vital natural resource to the City. Wetlands in close proximity to the Clinton River that provide the natural functions described should be preserved when at all possible. Therefore, the on-site wetland should be considered a valuable natural resource to the City.

Unnamed Watercourse Quality Assessment

The unnamed watercourse, which is a tributary to the Clinton River, exhibited very sparse to no vegetation within its channel and was flowing on the day of the site inspection. The bed of this watercourse was generally sandy with intermittent amounts of cobbles, gravel, and coarse sands. The unnamed watercourse appears to be a result of natural and man-made processes. Based on review of historical aerial photography, the watercourse was originally a portion of a larger natural watercourse system that extended to the southeast. During the early 1980s, commercial and residential development off-site likely changed the watercourse's primary function into that of a stormwater conveyance, which continues to the present day. The watercourse appears to be conduct overland flow only; no evidence of ground water inputs, such seeps, were observed in or around the watercourse. Despite its primary function of a stormwater conveyance, the watercourse showed no significant signs of ecological degradation, such as a silted channel, channel cutting, or scour, and water clarity was high. This watercourse is directly connected to the Clinton River to the west, which is a vital natural resource to the City. Based on the factors above, the unnamed watercourse is of high ecological quality and function and should be considered a valuable natural resource to 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. The Current Plans show all alpha-numeric wetland flagging as applied in the field, the date the wetland delineation was completed (June 6, 2017), and by whom the wetland delineation was completed by (Theresa Pardington of Nowak and

- Fraus). The applicant is advised that wetland delineations are only considered valid by the City and EGLE for a period of three years past the completion date.
- b. Former plans indicated a “ditch” in the western portion of the property within the on-site wetland. This feature is an unnamed watercourse that exhibited defined channel bed and banks and was flowing on the day of the site inspection and, thus, meets the definition of a stream under Part 301. The Current Plans show this feature as an unnamed watercourse, 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. As proposed, the Current Plans do not require a City Wetland Use Permit nor likely an EGLE Part 303 permit. ASTI recommends the Applicant contact EGLE for an official regulatory assessment prior to final plan design.
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 show all areas of Natural Features Setback. Revised plans must show all areas of applicable Natural Features Setback named as such (not “25’ Wetland Buffer”) and all proposed impacts to on-site Natural Features Setback areas, as calculated by the Applicant, and shown in linear feet on revised plans.
 - b. Natural Features Setback areas on-site were comprised of a high-quality area in the western half of the property and a medium-quality area in the eastern half of the property.

The high-quality area Natural features Setback areas in the western half of the site was comprised of a moderately mature upland forest. Dominant vegetation in this area was comprised of trees of the species of red oak (*Quercus rubra*), ironwood (*Ostrya virginiana*), black cherry (*Prunus serotina*), American elm, and linden (*Tilia Americana*). The estimated tree canopy in this area was estimated to be 85%. The trees in this area likely provide significant shade for the unnamed watercourse during the growing season, as well as reducing erosion, slowing run-off, and reducing sedimentation. Additionally, the tree canopy likely keeps the unnamed watercourse’s waters cool prior to entering the Clinton River

to the west, thereby acting as a high-quality buffer to the on-site wetland and unnamed watercourse. The shrub layer was sparse and was dominated by the invasive species Tartarian honeysuckle and the native black cherry, generally in equal distribution. The herbaceous layer was sparse at the time of the site inspection and was comprised of the native species of pretty sedge (*Carex woodii*) and poison ivy.

The medium-quality Natural Features Setback area located in the eastern half of the site was comprised of a young forest dominated by 10-15 year old trees of the native species green ash, American elm, and green hawthorn; the canopy in the tree layer was estimated at 60%. The shrub layer in this area was thick and was dominated by the invasive species Tartarian honeysuckle and glossy buckthorn. The herbaceous layer was sparse at the time of the site inspection and was dominated by the invasive species mustard garlic (*Allaria petiolaris*). While the tree layer was dominated by common native species (approximately 100%), the shrub and herbaceous layers were dominated by invasive species (approximately 80%) and as a whole, this Natural Features Setback area is of low floristic quality. However, this area did include steeper topography than the west portion of the site and the Natural Features Setback provides a medium buffer to the on-site wetland and unnamed watercourse by reducing overland flow rates, providing partial watercourse shading, slope stabilization, and reducing potential erosion and should be considered medium quality.

- c. The Current Plans indicate that approximately 25 linear feet of Natural Features Setback impacts will occur from the installation of a storm water outlet pipe from Detention Pond #2. The Natural Features Setback in this area is of medium quality and acts as an adequate buffer to the on-site wetland and unnamed watercourse. However, these impacts appear to be small and temporary. Thus, ASTI recommends the City allow for these impacts.

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. BMPs must be implemented during the construction phase of the proposed project and any temporarily impacted areas must be

restored to original grade with original soils or equivalent soils and seeded with a City-approved seed mix. All this information, as related to Natural Features Setback areas, is shown on the Current Plans to ASTI's satisfaction.

- d. The Current Plans indicate approximately 100 linear feet of impacts to Natural Features Setback in the south-central portion of the site will occur from the installation of temporary tree protection fencing. The Natural Features Setback in this area is of medium quality, but the impacts are presumed to be temporary and, thus, ASTI recommends the City allow for the proposed impacts. However, these temporary impacts are not shown on the Current Plans. Revised plans must show the calculated impacts to the Natural Features Setback in this area and stated them linear feet. Furthermore, revised plans must show a note stating all temporary Natural Features Setback impacts shall be restored to original grade with original soils or equivalent soils and seeded with a City-approved seed mix.

RECOMMENDATION

ASTI recommends the City approve the Current Plans on the condition that the items in comments 5.a and 5.d are addressed on revised plans.

Respectfully submitted,

ASTI ENVIRONMENTAL



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