

10448 Citation Drive, Suite 100 Brighton, MI 48116

Mailing Address: P.O. Box 2160 Brighton, MI 48116-2160

800 395-ASTI Fax: 810.225.3800

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June 21, 2007

Mr. Derek Delacourt, Deputy Director Department of Planning City of Rochester Hills 1000 Rochester Hills Drive Rochester Hills, MI 48309-3033

Subject:

File No. 05-039 Faith Evangelical Church;

Wetland Use Permit Review #3 New Site Plans received by the

City of Rochester Hills on June 11, 2007

Applicant:

Scott Barnes



Dear Mr. Delacourt:

The above referenced project proposes to construct a church building on two parcels totaling approximately \(\frac{7}{3}. \) acres. The site is located along Hamlin Road, west of Rochester Road, east of Livernois Road, and south of Avon Road. The site does not include any wetland or watercourses regulated by the Michigan Department of Environmental Quality (DEQ). However, the site does contain one wetland regulated by the City of Rochester Hills.

ASTI Environmental (ASTI) has reviewed the site plans received by the City on June 11, 2007 (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 that 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.



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- 2. Wetland and Watercourse Determinations (§126-531). This Section lists specific requirements for completion of a Wetland and Watercourse Boundary Determination.
 - a. ASTI conducted a Wetland and Watercourse Determination on the subject property as stated in the ASTI Wetland and Watercourse Boundary Determination Letter #1 (ASTI letter) dated November 30, 2005 and the associated Figure 1 Wetland/Watercourse Flagging Map. ASTI determined that a DEQ-and City-regulated watercourse existed on the property because said watercourse had an apparent connection to the Gibson Drain, which is a regulated stream. A letter from the DEQ dated October 9, 2006 stated that the watercourse ASTI determined to be DEQ-regulated did not meet the definition of a stream or that of a regulated wetland. Because DEQ has the final authority on the extent of regulated wetlands, lakes, and streams in the State of Michigan, ASTI is satisfied with the DEQ assessment. However, upon further review of the property through aerial photography, geographic information system (GIS) data, and knowledge of the site by ASTI staff, it is ASTI's opinion that this wetland is connected off-site to the east and west to larger wetland complexes, thus making the entire wetland greater than two acres (see Figure 2 On-site Wetland Connection). Because the off-site wetland connection is greater than two acres, this wetland is 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.
 - a. In response to the applicants' letter dated April 12, 2007, as stated in Comment 2.a above, ASTI agrees that the on-site wetland is not regulated by the DEQ as stated in the aforementioned DEQ letter. This determination means that no DEQ-regulated wetlands were determined to exist on-site. This must not be taken to mean there is a total absence of on-site wetlands. The DEQ letter states, "The on-site swale does contain a predominance of hydrophitic vegetation and sufficient hydrology to be identified as a wetland, but this wetland is not regulated by the DEQ." Clearly, the DEQ determined that the on-site swale meets the criteria of a wetland, but it is not regulated by the DEQ because it is not 5 acres or more in size and is not connected to or within 500 feet of (contiguous) a DEQ-regulated stream, lake, or pond.

The DEQ regulatory determination of the on-site wetland does not nullify that of the City.



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The regulatory criteria used by the City are similar to the DEQ, but wetlands of 2 acres or more in size are regulated by the City. ASTI has estimated that the on-site wetland is connected to a larger wetland system off-site to the east and west of the subject property and is greater than 2 acres in size (see attached Figure 2 – Off-site Wetland Connection). It is the applicant will be responsible for showing that the off-site wetland connections do not equal or exceed 2 acres. In this regard, ASTI received a black and white copy of an aerial of the site with the project engineer's hand drawn estimation of the size of the off-site wetland connection (see attached Nowak & Fraus sketch). This figure was extremely difficult to read and could not be evaluated by ASTI. The size of the off-site wetland connection must be shown by conducting a formal wetland delineation of the adjoining properties and surveying the wetland flagging from said delineation and depicting them on revised plans. If field inspection of the additional wetland flagging by ASTI shows the off-site wetland connection is found to be less than two acres or less, ASTI will agree that the on-site wetland is not regulated by the City.

- b. It is also ASTI's opinion that water quality downstream of the subject property would be better if detention for the proposed development were off line, even if the proposed detention basin was sized to accommodate runoff from properties upstream. An off-line detention basin, because it would not have a constant flow-through (akin to "base flow"), would have (1) greater ability to capture frequent, low-volume storm runoff events (effectively retaining them) and (2) ability to capture with greater efficiency the first-flush of major storm events. (An in-line detention facility would have a more-or-less continuous flow-through ("base flow") in the detention pond pool. Also, an off-line system would not contribute to warming of any base flow from the properties west of the subject property, whereas an in-line detention facility would lengthen time-of-travel, thereby increasing water temperature in warm seasons. Thus, ASTI does not recommend the current in-line detention system as depicted on the current plans.
- 4. **Application for Use Permit (§126-564).** This Section lists specific requirements for Wetland Use Permit applications. The following items must be addressed on a revised and dated Wetland Use Permit application and additional documentation submitted for further review:
 - a. No DEQ-regulated wetlands are within the project boundaries. The on-site wetland



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proposed to be impacted is regulated by the City, which would require a Wetland Use Permit. However, the project as proposed may qualify for a Wetland Use Permit exception (see Comment 4.b).

- b. A sheet (SP-7) depicting all wetland impacts in square feet has been included in the current plans. However, ASTI recommends that the proposed wetland impacts be shown on a general site plan, such as Sheet SP-3 or SP-4 on the current plans. Additionally, Sheet SP-7 of the current plans shows a "WETLAND TABLE" and associated notes regarding wetland regulatory status. As stated in Comment 3.a, the on-site wetland shall be considered regulated by the City until the applicant proves otherwise. This table and associated notes should be modified to reflect this or removed entirely.
- c. A calculated amount of 1,006 square feet of direct and permanent wetland impacts to the on-site wetland will result from the construction of the proposed detention basin in the central portion of the site.

This proposed action would qualify for an exception to the Wetland Use Permit 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 notes must be placed on revised plans if an exemption is granted by the City.

- 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. All impacts to Natural Features Setback areas are depicted and stated in linear feet on the current plans. However, the current plans refer to the Natural Features Setback as a "WETLAND BUFFER." All areas of Natural Features Setback must be labeled as such on revised plans.
 - b. A calculated amount of 320 lineal feet of direct and permanent Natural Features Setback impacts will result from of the construction of the proposed detention basin in the central



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portion of the site.

RECOMMENDATION

ASTI recommends the Planning Commission approve the current plans on the condition that Comments 4.b, 4.c, and 5.a are addressed on revised plans.

Kyle Hottinger / Wetland Ecologist

Respectfully submitted,

ASTI ENVIRONMENTAL

Peter G. Collins Vice President

Professional Wetland Scientist #1031 Certified Environmental Professional, Environmental Assessment #1021

ASTI Environmental File No. 6438-39