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August 11, 2016

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

Subject: File No. 89-114.2 Sanctuary in the Hills East PUD;

Wetland Use Permit Review #5;

Plans received by the City of Rochester Hills on

July 25, 2016

Applicant: MacLeish Building, Inc.

Dear Ms. Roediger:

The above referenced project proposes to construct seven residential buildings on eight parcels comprising 4.57 acres as a Planned Unit Development (PUD). The site is located along the east side of Sanctuary Boulevard, north of South Boulevard, and west of Crooks Road. The site includes wetland regulated by the City of Rochester Hills and likely the Michigan Department of Environmental Quality (DEQ).

ASTI has reviewed the site plans received by the City on July 25, 2016 (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

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 previously completed by the applicant's wetland consultant in September 2015, which was confirmed in the field by ASTI on March 21, 2016. The site contains two wetland areas: a larger wetland in the western portion and a smaller wetland in the eastern portion.

The larger wetland in the western portion is comprised of forested wetland in its southern two-thirds and of open water area with a scrub/shrub wetland fringe in its northern third. Dominant species observed in the forested portion included red maple (Acer rubrum), silver maple (Acer saccharinum), and cottonwood (Populus deltoides), with scattered American elm (Ulmus americana) and black willow (Salix nigra). Understory species were similar. Tree cover was robust and individuals ranged in size of approximately 6 inches diameter to 16 inches in diameter. Glossy buckthorn (Frangula alnus) was also observed in sparse amounts in the understory. Herbaceous cover was sparse at the time of inspection, with poison ivy (Toxicodendron radicans) being the dominant species. The open water portion of the western wetland exhibited a fringe of scrub/shrub wetland dominated by a dense gray dogwood (Cornus racemosa) colony. Herbaceous cover in the scrub/shrub fringe was sparse and was dominated by reed canary grass (Phalaris arundinacea). Overall, vegetation was dominated by native species with sparse invasive species cover throughout. The forested portion, the dense shrub cover in the wetland fringe of the open water area, and the open water area proper provide a locally diverse wildlife habitat. This wetland as a whole is a portion of a larger wetland system and is also partially within the 100-year flood plain of the Rouge River to the west/northwest and was observed to be actively detaining water on the day of the site inspection. Based on these factors, it is ASTI's opinion that the larger wetland in the western portion of the site is of high quality and function and should be considered a valuable natural resource to the City.

The smaller wetland, approximately 0.10 acres or less in size, in the eastern portion of the site was predominantly open water with a very minimal wetland fringe. Dominant vegetation observed within this wetland included scattered cottonwood saplings, glossy buckthorn, and poison ivy. This wetland appeared to be the result of a former disturbance on or around the site. No significant wildlife habitat, significant flood reducing, or water quality improvement properties were observed. Based on this wetlands small size, its isolation on-site, and lack



of vegetation, it is ASTI's opinion that this wetland is of little functional value, of low quality, and should not be considered a valuable natural resource to the City.

The larger wetland to the west is regulated by the City and likely the DEQ because it is larger than five acres in total size. The smaller wetland in the eastern portion of the site is not regulated by the City or likely the DEQ because it is less than two acres in size and is not within 500 feet of or directly connected to, an inland lake or stream regulated under Part 301.

ASTI agrees with the depiction of the on-site wetlands on the Current Plans based on the aforementioned site inspection. The applicant should be advised that wetland delineations are only considered valid by the DEQ and the City for a period of three years.

- 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. The Current Plans show all proposed impacts to City- and DEQ-regulated wetlands calculated and stated in square feet on revised plans. This is to ASTI's satisfaction.
 - b. The Current Plans show that 1,427 square feet of permanent impacts will result to the western wetland from the construction of the proposed private drive Sanctuary Court, a proposed retaining wall to the north and south of Sanctuary Court, and a proposed culvert beneath Sanctuary Court. The wetland in this area is part of a high quality wetland and any impacts to this wetland should be minimized. The placement of the proposed Sanctuary Court appears to be dependent on occurring within the western wetland. The Current Plans show the proposed Sanctuary Court crossing the smallest span of the western wetland, thereby minimizing wetland impacts for this proposed activity. The Current Plans show a retaining wall in this area. ASTI agrees with the construction of a retaining wall in this area, which should further minimize unplanned impacts to this wetland. Moreover, the Current Plans show the retaining wall and propose utilities per City Engineering standards. This is all to ASTI's satisfaction and ASTI recommends a Wetland Use permit be issued for this activity.



c. The Current Plans show that 253 square feet of temporary impacts to the western wetland will result from the placement of a culvert to the proposed forebay south of Sanctuary Court.

This proposed action qualifies 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. Revised plans must note that BMPs will be implemented during the construction phase of the proposed project and that any temporary impact areas be restored to original grade with original soils or equivalent soils and seeded with a City-approved wetland seed mix. This is noted on the Current Plans to ASTI's satisfaction.

This action will require a Part 303 permit from the DEQ, which must be obtained and submitted to the City for review. This is noted on the Current Pans to ASTI's satisfaction.

d. The Current Plans show that 720 square feet of temporary impacts to the western wetland will result from the placement of a culvert to the proposed detention basin east of Sanctuary Boulevard.

This proposed action qualifies 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 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. Revised plans must note that BMPs will be implemented during the construction phase of the proposed project and that any temporary impact areas be restored to original grade with original soils or equivalent soils and seeded with a City-approved wetland seed mix. This is noted on the Current Plans to ASTI's satisfaction.

This action will require a Part 303 permit from the DEQ, which must be obtained and submitted to the City for review. This is noted on the Current Plans 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. A Wetland Use Permit from the City and a DEQ Part 303 Permit are required for this project as proposed. Once a DEQ permit is received by the applicant, it must be submitted to the City for review.
- 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. Should the City accept the applicant's proposal to develop the subject property as a PUD, subject to final review and approval as part of the site plan review process, the on-site Natural Features Setback regulations can be waived by the City at its discretion. The applicant should note that upon the request of the City, ASTI will re-evaluate any Natural Features Setback impacts if the City does not waive Natural Feature Setback regulations. The Current Plans show the Natural Features Setback areas to ASTI's satisfaction.

6. Additional Comments

- a. The previous plan submittal depicted a DEQ conservation easement in the western portion of the site. The applicant has provided a Termination of Conservation Easement document recorded at the Oakland County Register of Deeds on December 17, 2015. This valid written documentation that the DEQ has vacated the on-site conservation easement is to ASTI's satisfaction.
- b. Due to the high quality of the City-regulated wetland proposed to be impacted, ASTI recommended during previous reviews that a retaining wall, fieldstone wall, or some other City-approved permanent structure at least 18 inches in height be constructed along the boundary of the wetland east of Unit 2, west of Unit 3, and west of Unit 14 to ensure no further unplanned impacts from lawn maintenance or residential activities occur. The Current Plans show a proposed 18 inch high boulder retaining wall in the area specified above. This action will prevent unplanned wetland impacts to this area and is in the spirit of the PUD. This is to ASTI's satisfaction.



RECOMMENDATIONS

ASTI recommends the City approve the Current Plans.

Respectfully submitted,

ASTI ENVIRONMENTAL

Kyle Hottinger Wetland Ecologist Dianne Martin

Director, Resource Assessment & Mgmt. Professional Wetland Scientist #1313