

MEMORANDUM



TO: Members of the Planning Commission
FROM: Barbara ^{B. M. B.} McBeth, AICP, Community Development
SUBJECT: 21000 Turnberry Woodland Use Permit
DATE: October 3, 2008

Plans have been submitted for construction and other activities in the regulated woodland at 21000 Turnberry, frequently referred to as the Morgan Estate. The subject property is approximately 19 acres of land at the north end of the Turnberry Estates Subdivision, located north of Eight Mile Road, west of Haggerty Road. The proposed activities in the regulated woodland include the construction of a 477 square foot gazebo, installation of interpretive signage, demarcation of existing trails with logs to deter motorized vehicle traffic, removal of trash and landscape debris, removal of invasive species, removal of dead and/or diseased tree removal within 40 feet of the trails, addition of approximately 40 eastern red cedar trees, and removal of sugar maple seedlings and replacement of native shrub and herbaceous groundcover within the regulated woodland.

While the plans do not propose the removal of any regulated trees, the plan does propose impacts the woody overstory, understory and groundcover vegetation, along with the relocation of a pathway under the drip line of one regulated tree. A Woodland Use Permit is required for these activities within the regulated woodland per Woodland Ordinance Section 37-26 (a) and (c). The Planning Commission is asked to hold a public hearing on the matter and either approve or deny the homeowner's request.

Attached is a plan of the property, identifying the location of the proposed activities and construction in the back (north) half of the property which is considered regulated woodlands. The applicant has also provided a comprehensive Woodlands Management Plan booklet for the property. In addition to a complete description of the existing woodland, the plan contains a number of recommendations for woodland management and provides a number of photographs of the site.

Landscape Architect, David Beschke and Woodland Consultant, Martha Holzheuer met the applicant's representative Aimee Kay on the site and reviewed the existing site conditions. The applicant's representative responded to the woodland consultant's first review, and provided a subsequent plan and submittal answering a number of issues. Ms. Holzheuer's recommendations of the plan dated September 22, 2008 are provided in the attached memo.

The plan is recommended for approval with a few items to be addressed following action by the Planning Commission. Please note that both Turnberry Drive and the Morgan Estate have restricted access, so any Planning Commission member wishing to view or visit the site should contact the Planning Division for further instruction.

Following the public hearing on this matter, the Planning Commission is asked to approve or deny the homeowner's request. Sample motions have been provided for convenience.

Approval of Request:

In the matter of 21000 Turnberry, WRB08-01, motion to approve the homeowner's request to allow the construction of a gazebo, installation of interpretive signage, demarcation of existing trails, removal of trash and landscape debris, removal of invasive species, pruning and removal of dead and diseased trees within 40 feet of the trails, addition of 40 eastern redcedar trees, and removal of sugar maple seedlings and replacement with native shrub and herbaceous groundcover within the regulated woodland, subject to:

- 1) The terms listed in ECT memo dated October 1, 2008;
- 2) Fees and performance guarantees will be required prior to the commencement of work; and
- 2) (*add additional stipulations here*)...;

For the reasons that (*insert comment here*)...

Denial of Request:

In the matter of 21000 Turnberry, WRB08-01, motion to deny the homeowner's request, for the reason that (*insert comment here*).

Attachments ECT Woodland Review Memo

C David Beschke, Landscape Architect
 Martha Holzheuer, ECT
 Aimee Kay, Kay Environmental & Associates



Environmental Consulting & Technology, Inc.

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FAX (734) 769-3164

MEMORANDUM

TO: Ms. Barbara McBeth
Deputy Director of Community Development
City of Novi

FROM: Martha Holzheuer
Certified Arborist

DATE: October 1, 2008

RE: **Woodland Review**
SI08-104
21000 Turnberry Blvd. – Turnberry Estates
Plan Date: September 22, 2008
(Stamped "Received" September 26, 2008, City of Novi Community Development)

Environmental Consulting & Technology, Inc. (ECT) has completed our review of the plot plan dated September 22, 2008 (Plan) that was stamped "Received" by the City on September 26, 2008 for the above-referenced project. The Plan was reviewed for conformance with the City of Novi Woodland Ordinance, Chapter 37. ECT conducted a field review of the proposed project area on August 26, 2008, accompanied by Aimee Kay of Kay Environmental & Associates and David Beschke of the City of Novi.

Site Review

ECT found that the Plan accurately depicts existing site conditions, with the exception of recent piles of woodchips and landscaping waste materials adjacent to the trail system. These piles are having a negative impact on regulated woodland trees, depriving their root zones of oxygen and causing crown dieback. The placement of waste materials in regulated woodland is a violation, and these materials should be removed from the woodland and properly disposed of immediately.

The surveyed trees in the woodland have been temporarily marked with flagging tape and are in the process of being more permanently marked with small metal tree tags. ECT believes these tree tags are not problematic and are a reasonable alternative to painted numbers that would degrade the aesthetics of the woodland. ECT confirmed that the entire trail system is unpaved, bare soil and that the trails are used both by pedestrians and motorized vehicles.

Plan Review

The Plan proposes the construction of a 477 sq. ft. gazebo, installation of interpretive signage, demarcation of existing trails with logs to deter motorized vehicle traffic, removal of trash and landscape debris, invasive species removal, dead and/or diseased tree removal and pruning within 40 ft. of the trails for safety, addition of approximately 40 eastern redcedar (*Juniperus virginiana*) trees for screening adjacent land uses, and removal of sugar maple (*Acer saccharum*) seedlings and replacement with native shrub and herbaceous groundcover within the regulated woodland.

In general, it appears as if the Applicant is prepared to meet the requirements of the City of Novi Woodland Ordinance but needs to address the cost estimate for tree replacement requirements for the regulated woodland tree

(#650), whose root zone will be impacted during gazebo construction and trail modification (See comments in bold italics below). The removal of live regulated trees is not proposed. Considering the proposed Plan and impacts to woody overstory, understory, and groundcover vegetation, a Woodland Use Permit is required for the proposed activities within the regulated woodland per Woodland Ordinance Section 37-26 (a) and (c). A Building Permit is also required for the gazebo.

Site Plan Compliance with Ordinance Chapter 37 Standards

The Plan dated July 22, 2008 lacked several items necessary for compliance with the Site Plan standards and necessary for understanding the impacts of the proposed project. The following comments are from ECT's previous review letter dated September 5, 2008. ECT's comments on these issues with regards to the current plan are provided in bold italics below:

- Full scientific (genus and species) and common names of the trees surveyed, in addition to diameter-at-breast-height (d.b.h.), condition, and save vs. impact status information for trees within 50 feet of areas to be disturbed shown on the actual scaled, plan drawing.

Complete.

- Existing general soil conditions on the site.

Complete.

- Statement as to why there is no practical alternative location for the proposed structure, e.g. regulated tree removal, use of existing trails for access, etc.

Complete.

- Statement as to the proposed grade changes and proposed drainage pattern changes for the site, including changes in water levels within protected woodlands.

Complete.

- Statement as to how trees not proposed for removal will be protected during construction and on a *permanent* basis. The Plan must show a more detailed location of tree protection barriers relative to the proposed gazebo and regulated trees to remain, including their canopy widths so that root zone impact can be assessed. Construction staging area impacts should be shown, if applicable, as well as relocation of the trail around the gazebo and associated impacts. ECT strongly encourages the Applicant to consider placing the regulated woodlands in a conservation easement to protect this natural feature in the future.

Complete. The Applicant notes that "The Morgan Woodland is one of the largest intact woodlands within the southeastern portion of the City of Novi limits." In addition to the management strategies outlined in the "Morgan Estate Woodlands Management Plan," ECT continues to strongly encourage the Applicant to consider placing the regulated woodlands in a conservation easement to protect this valuable natural feature in the future.

- Detail drawing of the gazebo structure, including a footing plan. ECT recommends the use of post footings rather than a poured concrete foundation in order to minimize root zone impacts.

A footing plan and detailed drawing of the gazebo have not been provided, but gazebo footing notes have been added to the plan. Poured concrete footings are not to be used for the foundation. 4x4 treated posts embedded in 10" thick concrete poured to 42" below grade are to be used instead to minimize root zone impact to regulated trees. All floor structures are to be a minimum of 6" above grade. Given that gazebo design has not been finalized, ECT recommends that the Applicant provide a finished floor elevation and not-to-exceed height for the gazebo.

- Any utilities and their associated easements and subsequent impacts must also be shown on the plan.

Complete. Note has been added stating no utilities are proposed for the gazebo structure. Given this, ECT questions the relevance of Item 5 regarding utility service requests under the General Tree Protection Notes.

- Detail drawing of any other built elements, e.g. signage or fencing. ECT does not recommend that the evergreens be planted along northeast property boundary as screening due to deep shade from onsite and adjacent maple trees and low probability of survivorship of these trees.

A detail of the proposed signage has not been provided, as signage is still being designed. However, the Applicant states in their letter dated September 26, 2008 that signage will be installed on 2x2" post maximum and be no higher than 3'. ECT recommends that the sign proposed within Wetland A be shifted to the 25' natural setback to reduce freeze-thaw heaving of the sign and minimize disturbance to the wetland. Although ECT does not object to the planting of a native vegetative screen along the northeast portion of the property, we continue to not recommend that the redcedars be planted along northeast property boundary as screening due to deep shade from onsite and adjacent maple trees and low probability of survivorship of these trees.

- Cost estimate for the compensation of impacted regulated woodland trees. Normally, when the root zone cannot be completely avoided for a regulated tree, the Applicant is asked to bond for the trees in question. The bond shall consist of the appropriate number of tree replacement credits per the replacement table in the Woodland Ordinance at \$400 per credit. The trees will be evaluated at the end of two years following impact. If the trees are found to be healthy, the bond will be released back to the Applicant. Considering that one of the objectives of the proposed project is to diversify the native plant community of the woodland, ECT would also accept the following in lieu of bonding: 1) care is taken to retain and minimize root zone impact to regulated trees surrounding the gazebo and 2) the Applicant provides the appropriate number of 2.5" caliper tree replacements onsite to be planted in gaps created by dead and diseased tree removal. These replacements would add to the diversity of tree species in the woodland and might include specimens of bitternut and/or shagbark hickory (*Carya cordiformis* and *C. ovata*), ironwood (*Ostrya virginiana*), musclewood (*Carpinus caroliniana*), American basswood (*Tilia americana*), tuliptree (*Liriodendron tulipifera*), and northern red oak (*Quercus rubra*).

The current plan proposes to avoid working within the drip lines of all regulated trees except #650, where the 4' path skirting the gazebo will meet the existing path. ECT recommends that 2, 2.5" caliper minimum replacement trees are field located in gaps created by dead and diseased tree removal. If field conditions are such that additional regulated tree drip lines cannot be completely protected during construction, the appropriate number of replacements must also be provided in a similar manner. A cost estimate for these replacements should be provided on the plan per ordinance standards. The planting of additional trees in gaps to increase woodland tree species diversity is welcomed.

- Note on plan stating how existing paths will be protected, e.g. delineated with logs, and that no new paths will be created to protect the root zones and soil structure of the woodland. ECT does not recommend relocating paths that currently run through wetlands or natural features setbacks because this would cause more soil compaction and root zone impact. However, these existing paths should not be used during wet soil conditions, especially by motorized vehicles. Rutting of soils is considered a change in grade and drainage and is a wetland violation.

Complete.

- Note on plan stating that no building activity and/or grade changes are proposed within the wetlands onsite, thus negating the need for a Wetland Use Permit.

Complete.

- Note on plan documenting how maple seedlings will be thinned.

Complete.

- Note stating that coarse woody debris will be left in place within the woodland as wildlife habitat and to promote natural nutrient cycling.

Complete.

- Lastly, rather than completely leveling dead/diseased trees, ECT recommends that standing snags a minimum of 20 feet tall are left wherever safety allows to provide woodpecker and other cavity nesting wildlife habitat.

Complete.

Recommendation

ECT recommends approval of the Plan, contingent upon the Applicant addressing the minor comments outlined above. Due to proposed regulated woodland impacts, a Woodland Use Permit is required for the proposed activities. Landscape waste material removal has been documented by the Applicant as initiated on September 25, 2008.

ECT applauds the Applicant's plans to improve the quality of the regulated woodlands on the property through invasive species removal, waste removal, and additional native species plantings. ECT strongly recommends that the Applicant places the remaining regulated woodland on the property under a conservation easement to protect essential ecological functions in the future.

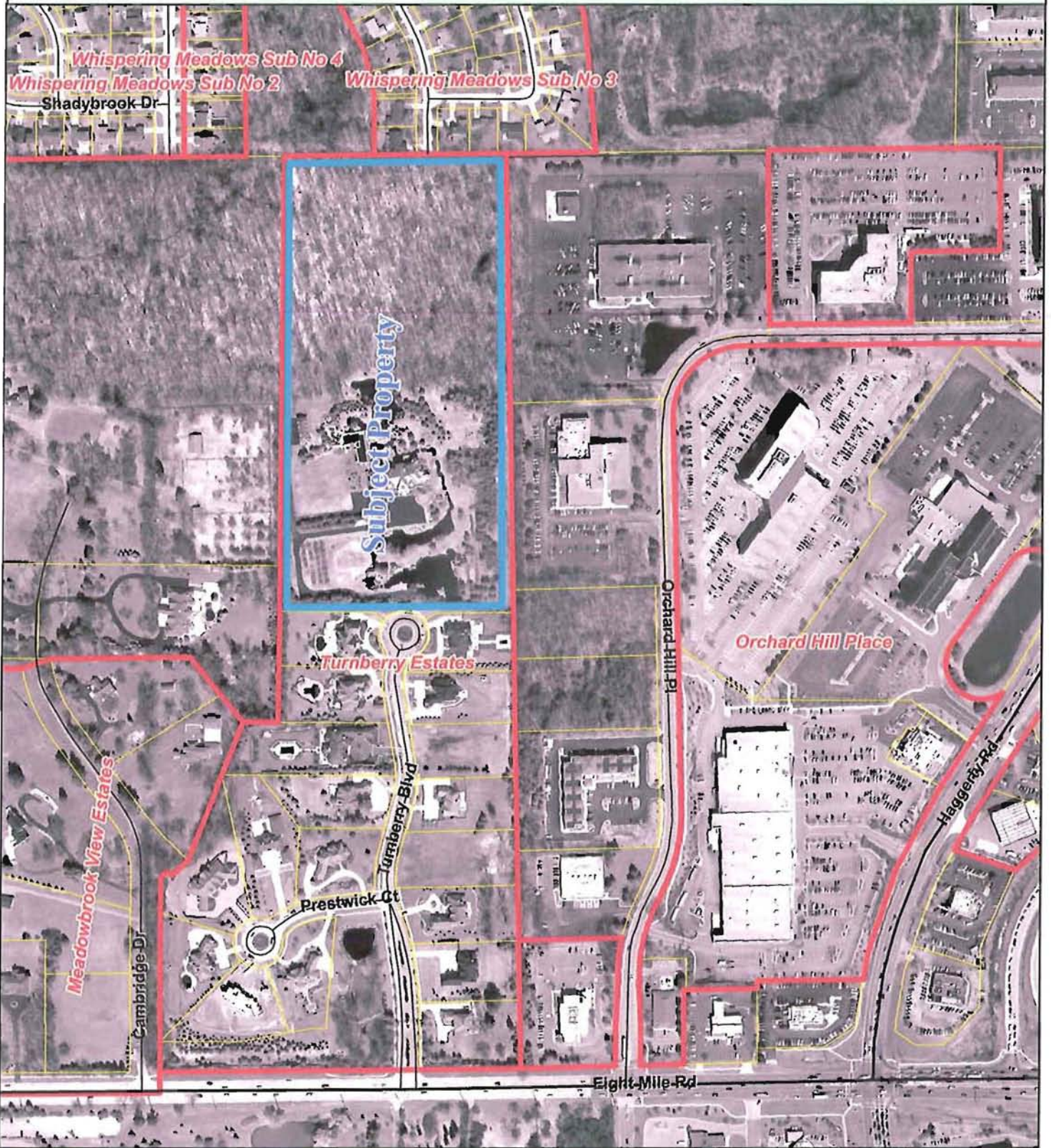
cc: David Beschke, City of Novi
Angela Pawlowski, City of Novi

WOODLANDS PROTECTION ORDINANCE - EXCERPT
ARTICLE II. PERMIT

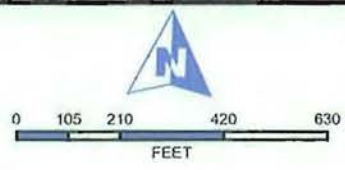
Sec. 37-26. Required.

- * (a) Except for those activities expressly permitted by section 37-27, it shall be unlawful for any person to conduct any activity within a woodlands area without first having obtained a use permit upon proper application including the following activities:
- (1) Removing, damaging or destroying any tree or similar woody vegetation of any d.b.h. A woodlands area that is also within a wetland or watercourse regulated by Article V of Chapter 12 shall not be exempt from the requirements of this chapter;
 - (2) Removing, damaging or destroying any historic or specimen tree; and
 - (3) Land clearing or grubbing.
 - (4) Conversion of a farm operation use to a non-farm operation use without the restoration of the affected woodlands area on the property pursuant to subsection 37-8(b).
- (b) Where a final subdivision plat or a final site development plan which includes activities regulated by this chapter has been reviewed and approved by the city in conformance with the requirements of this chapter, such approval together with any additional terms and conditions attached thereto shall be considered to have completed the requirements for a permit under this chapter which shall then be issued by the city.
- * (c) Unless the requirements of this chapter can be satisfied by the setting aside without encroachment of sufficient woodland areas, the developer of a single-family residential subdivision plat or single-family residential site condominium shall, as a part of use permit approval under this article, designate building areas for all structures on each subdivision lot or site condominium unit. Once such building areas have been approved and made a part of the use permit, no additional woodlands use permit shall be required for the erection of structures within such a building area. Activities on a subdivision lot or site condominium unit that extend beyond the confines of such a designated building area shall require an additional approval pursuant to this chapter, which shall only be approved when it is not otherwise feasible to utilize the lot or site condominium unit for single-family residential purposes. Whenever a building permit is granted for construction of a single-family residence the permit holder shall post a performance guarantee to ensure continued compliance with the use permit granted with the platting of the subdivision or approval of the site condominium. The form of the guarantee shall be in accordance with the provisions of chapter 26.5. The amount of the guarantee shall be based upon a pro rata share of the performance guarantee posted by the subdivision or site condominium developer under subsection 37-30(e)(3). With each such posting, the developer may apply for a corresponding reduction (or return) of the original performance guarantee posted by the developer under subsection 37-30(e)(3).

Turnberry Location Map

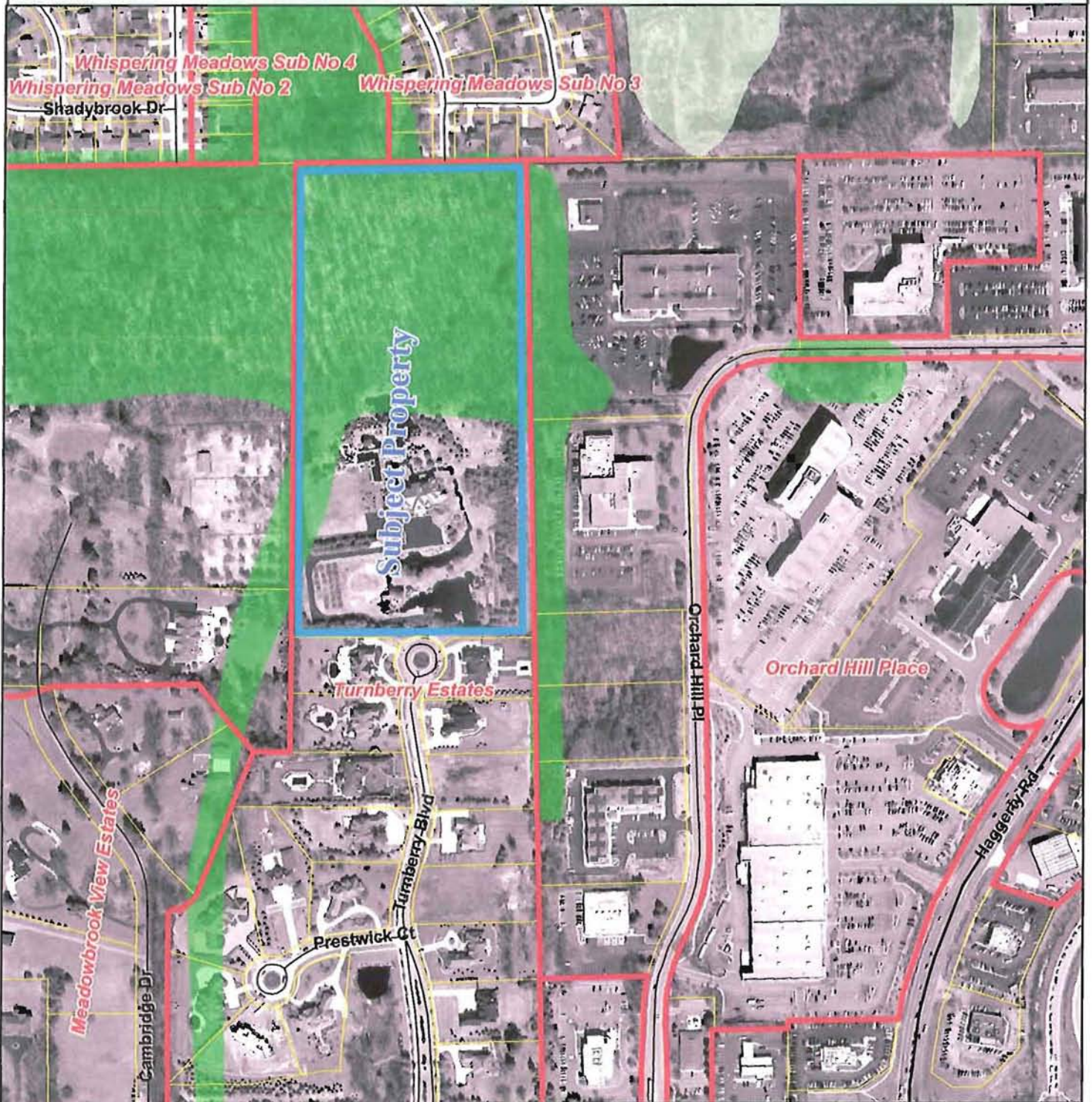


CITY OF NOVI
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 MARK SPENCER, AICP, PLANNER
 CREATED: 10/3/08



MAP INTERPRETATION NOTICE
 Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

Turnberry Regulated Woodland Map

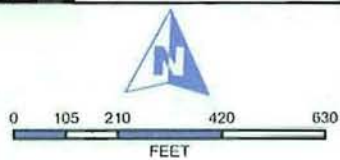


Legend

Woodlands Light Medium Dense



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