ROCHESTER HILLS
MICHIGAN

ASSESSING DEPARTMENT

Laurie A Taylor, Director

From: Nancy McLaughlin
To: Sara Roediger
Date: 11/20/18
Re: Project: Redwood at Rochester Hills Review #1
Parcel No: 70-15-13-476-005
File No.: 18-022 BESC18-0175
Applicant: Redwood USA, LLC

No comment.

ROCHESTER HILLS
MICHIGAN

BUILDING DEPARTMENT
Scott Cope

From: Mark Artinian, Building Inspector/Plan Reviewer
To: Kristen Kapelanski, Planning Department
Date: June 21, 2019
Re: Redwood Living Residential Development – Review #3
East Avon Rd & Dequindre Rd
Sidwell: 15-13-476-005
City File: 18-022

The Building Department has reviewed the revised site plan approval documents received by the Planning Department on June 11, 2019 for the above referenced project. Our review was based on the 2015 Michigan Residential Code, the 2015 Michigan Building Code, ICC A117.1-2009 and the City of Rochester Hills Zoning Ordinance. **Approval is recommended.**

The following items should be addressed on the building permit documents:

1. Provide a minimum rear yard setback of 35 feet between Buildings 'R' and 'Q' per setback requirements noted under "Site Data".
2. Accessible parking spaces shall be a Universal Barrier Free design to allow van access in any accessible parking space per the City Ordinance Section 138-11.300. Universal barrier free spaces shall be 11 feet in width, 18 feet in depth with a 5 foot access aisle. Please add these dimensions to the accessible space(s) shown.
3. Provide individual residence plot plans for code compliant site drainage at the time of individual building permit applications.
    a. Lots shall be graded to fall away from foundation walls a minimum of 6 inches within the first 10 feet.
    Exception: Where lot lines, walls, slopes or other physical barriers prohibit 6 inches (152 mm) of fall within 10 feet (3048mm), the final grade shall slope away from the foundation at a minimum slope of 5 percent and the water shall be directed to drains or swales to ensure drainage away from the structure. Swales shall be sloped a minimum of 2 percent when located within 10 feet (3048 mm) of the building foundation. Impervious surfaces within 10 feet (3048 mm) of the building foundation shall be sloped a minimum of 2 percent away from the building. Section R-401.3
    b. Driveway slopes shall meet the following requirements:
        i. Approach and driveway: 2% minimum – 10% maximum.
        ii. Sidewalk cross-slope (including portion in the driveway approach): 1% minimum, 2% maximum is allowed but a design slope of 1.5% will allow for construction inaccuracies.

Should the applicant have any questions or require addition information they can call the Building Department at 248-656-4615.

ROCHESTER HILLS
MICHIGAN

DPS/Engineering
Allan E. Schneck, P.E., Director

JRB

From: Jason Boughton, AC, Engineering Utilities Coordinator
To: Kristen Kapelanski, AICP, Planning Manager
Date: September 5, 2019
Re: Redwood at Rochester Hills, City File #18-022, Section 13 — Approved
PUD Plan Review #5

Engineering Services has reviewed the site plan received by the Department of Public Services on August 27, 2019 for the above referenced project. Engineering Services recommends site plan approval with the following comments:

Sanitary Sewer
1. An offsite sanitary sewer easement will need to be obtained from the owners of parcel #15-13-476-004 to provide this development with an outlet for sanitary sewer.

Water Main
1. The exact area, size, and design of the PRV vault will be part of the construction plan phase of the project.

Storm Sewer
1. Revise pipe slopes throughout to be between minimum and maximum allowable per the City of Rochester Hills Engineering Design Standards.
2. Provide a primary overflow at the 100-year elevation unrestricted for detention pond 4.

Grading
1. Raise the finish grade and finish floor of building M to provide more freeboard buffer for the adjacent wetland detention being proposed.

Traffic/Pavement
1. Awaiting approved RCOC ROW use permit and acknowledged by the developer. Provide a note on plans to this affect. Please note PUD approval will not be accepted until RCOC permit is received.
2. The right-in/right-out may need to be defined better to discourage motorists from entering/exiting incorrectly. MDOT detail GEO-680-B on sheet 4 of 6 may apply. Again, we are reviewing the plans in conjunction with RCOC roundabout plans and do not anticipate any conflicts between the two related drive locations. This comment will remain until complete but does not affect conditional approval.
3. The road and pathway sight lines at each approach should be shown on the Landscape plans (which were not included in plan set). The sight lines must be unobstructed, per details, by any existing or proposed objects (CITY detail attached).

Pathway/Sidewalk
1. The proposed PUD plan should include the extension of the pathway to match RCOC's pathway terminus along Avon Rd and Dequindre Rd that are not included with their plans, to be constructed by the developer. This can be accomplished by either physically constructing the path extension with this development, or by contributing funds to be used at the time that the RCOC constructs the roundabouts. The funding contribution will need to include PE, CE and construction costs. Further coordination with RCOC will be necessary.
2. A CITY ROW use permit will be required for the proposed pathway work, acknowledged on previous submission. Provide note on plans to this affect. This comment does not affect conditional approval.

The applicant needs to submit a Land Improvement Permit (LIP) application with engineer's estimate, fee and construction plans to proceed with the construction plan review process started.

JB/md
Attachments: Sight Distance Details
c: Allan E. Schneck, P.E., Director; DPS
Tracey Balint, P.E., Public Utilities Engineering Mgr.; DPS
Scott Windingland, Engineering Aide; DPS
Keith Depp, Project Engineer; DPS
Maureen Gentry, Planning Specialist; Planning & Development
Paul Davis, P.E. City Engineer/Deputy Director; DPS
Paul G. Shumejko, P.E., PTOE, Transportation Eng. Mgr.; DPS
Russ George, Technician-Permits; DPS
File
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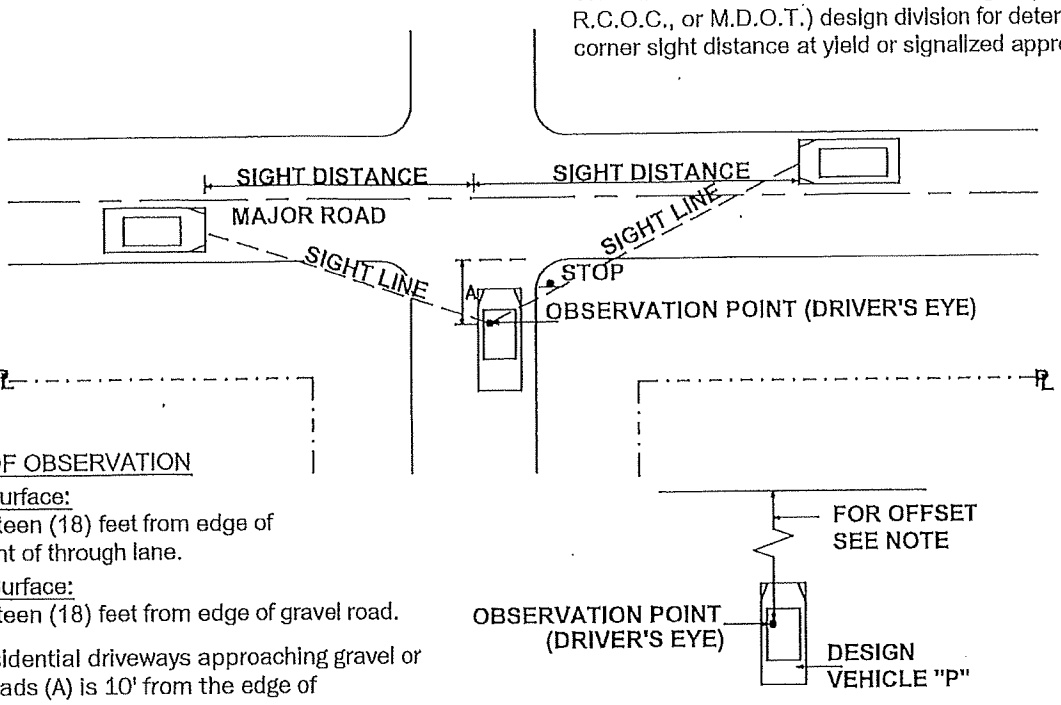
Different sight distances are required for yield or signal controlled intersections. Contact road agency's (City, R.C.O.C., or M.D.O.T.) design division for determining corner sight distance at yield or signalized approaches.



POINT OF OBSERVATION

Paved Surface:
(A) Eighteen (18) feet from edge of pavement of through lane.

Gravel Surface:
(A) Eighteen (18) feet from edge of gravel road.

* For residential driveways approaching gravel or paved roads (A) is 10' from the edge of gravel/pavement.

The point of vision shall be from the height of eye, 3.5 feet above the proposed intersecting elevation to a height of object 3.5 feet above the existing or proposed road centerline and shall be continuously visible within the specified limits.

MINIMUM CORNER SIGHT DISTANCE FOR DRIVEWAYS AND STREETS AT MAJOR ROAD INTERSECTIONS FOR PASSENGER VEHICLES		
MAJOR ROAD POSTED OR 85% SPEED IN MPH	MINIMUM SIGHT DISTANCE IN FEET, BOTH DIRECTIONS	
	2 OR 3 LANE THRU ROAD IN FEET	4 OR 5 LANE THRU ROAD IN FEET
25	280	295
30	335	355
35	390	415
40	445	470
45	500	530
50	555	590
55	610	650

The basic prima facia speed shall be used for gravel roads, unless otherwise approved by the Engineer.

NOTES

1. Any deviation from given data requires an engineering study approved by the road agency (City, R.C.O.C., or M.D.O.T.) in accordance with the latest edition AASHTO policy on geometric design.
2. This design guide also applies to new Permit and Plat construction projects.
3. The above data is based on a left turn maneuver into the intersecting roadway as described in AASHTO. Due to the higher potential accident severity, the left turning sight distance was used to determine the corner sight distanced required. Right turn onto major roads shall have the same sight distances.
4. Existing site conditions may require an engineering study to determine sight distance.

CITY OF ROCHESTER HILLS
STANDARD DETAIL FOR:

Sight Distance Roadways

ROCHESTER HILLS MICHIGAN

DRAWN BY:	FILE NAME:	PLAN DATE:	REV.	REV.	REV.
B. SMITH	CIRC DRV	8/28/1996	4/12/2012	3/15/2014	
APPROVED BY: PAUL SHUMEJKO, P.E., PTOE CITY TRANSPORTATION ENGINEER			NOT TO SCALE		SHEET 1 OF 2

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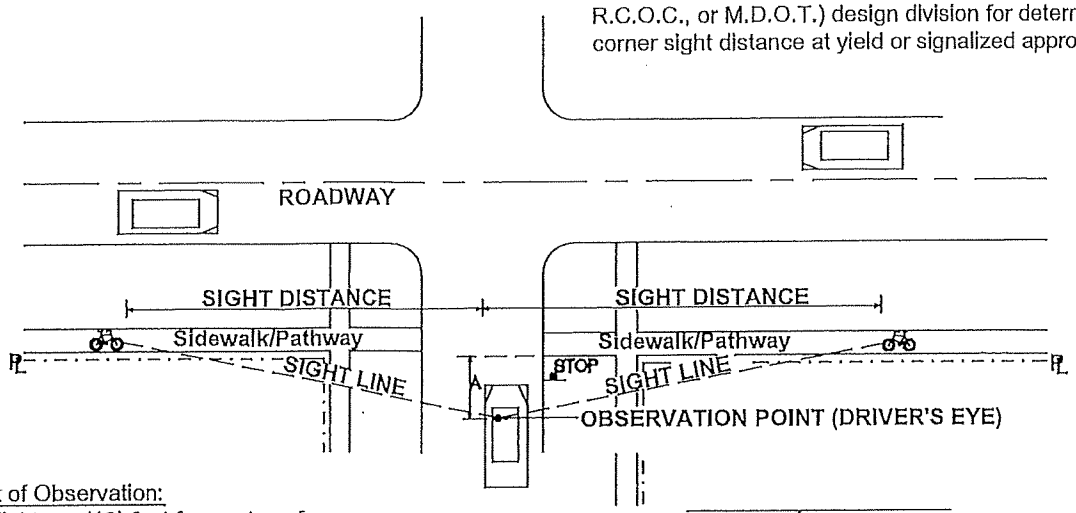
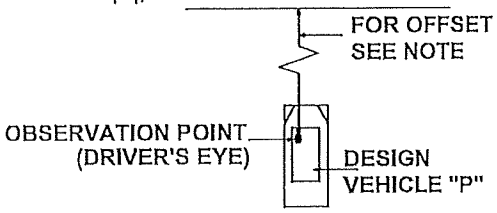
Different sight distances are required for yield or signal controlled intersections. Contact road agency's (City, R.C.O.C., or M.D.O.T.) design division for determining corner sight distance at yield or signalized approaches.



Point of Observation:
(A) Eighteen (18) feet from edge of pavement of sidewalk/pathway.



The point of vision shall be from the height of eye, 3.5 feet above the proposed intersecting elevation to a height of object 3.5 feet above the existing or proposed road centerline and shall be continuously visible within the specified limits.

MINIMUM CORNER SIGHT DISTANCE FOR STREETS AT INTERSECTIONS	
PATHWAY GRADE APPROACHING INTERSECTION (%)	MINIMUM SIGHT DISTANCE IN FEET, BOTH DIRECTIONS
0	135
-1	140
-2	145
-3	150
-4	160
-5	165
-6	175
-7	190
-8	205

NOTES

1. Any deviation from given data requires an engineering study approved by the road agency (City, R.C.O.C., or M.D.O.T.) in accordance with the latest edition AASHTO Guide for the Development of Bicycle Facilities.
2. This design guide also applies to new Permit and Plat construction projects.
3. The bicycle design speed used in the chart is 18 MPH.
4. Approach pathway slope greater than 8% is not allowed due to ADA compliance.
5. Existing site conditions may require an engineering study to determine sight distance.

CITY OF ROCHESTER HILLS
STANDARD DETAIL FOR:

Sight Distance Pathways

ROCHESTER HILLS MICHIGAN

DRAWN BY:	FILE NAME:	PLAN DATE:	REV.	REV.	REV.
B. SMITH	CIRC DRV	8/28/1996	4/12/2012	3/15/2014	

APPROVED BY:
PAUL SHUMEJKO, P.E., PTOE
CITY TRANSPORTATION ENGINEER

NOT TO SCALE

SHEET 2 OF 2

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ROCHESTER HILLS
MICHIGAN

DPS/Engineering
Allan E. Schneck, P.E., Director

From: Paul M. Davis, P.E., City Engineer/Deputy DPS Director PMD
To: Kristen Kapelanski, AICP, Planning Manager
Date: October 2, 2019
Re: Redwood at Rochester Hills, City File #18-022, Section 13

Thank you for your patience with the Department of Public Services (DPS) in regards to the desired public improvement(s) for consideration with the Redwood at Rochester Hills Planned Unit Development (PUD). You have received differing messages from the DPS and this correspondence serves to clarify what options and priorities that DPS would like the Planning Commission to consider as conditions of their future approval for the PUD. I apologize for any frustrations that resulted from the mixed messages to you or the developer.

Our latest plan review for the Redwood development referenced two proposed public improvement items:

1) the relocation of the existing pressure reducing vault on the west side of Dequindre south of Avon, and

2) the construction of off-site pathway along the property at the southwest corner of Avon and Dequindre (property identification number 70-15-13-476-006).

The Road Commission for Oakland County (RCOC) is planning to reconstruct the Avon/Dequindre intersection into a roundabout and also rebuild the Avon Road bridge crossing of the Clinton River. Another future project being planned in this area is the Great Lakes Water Authority (GLWA) replacement of a 96-inch water main. The RCOC has commented that they would like to shift the existing intersection to the west with the proposed roundabout design. Since their conceptual alignment might interfere with the existing pressure reducing vault (PRV) location, it was suggested that the Redwood development relocate this PRV facility onto their property and provide appropriate easement to the City covering the vault and water main encroachment.

A preliminary cost to reconstruct the relocated PRV was estimated at $100,000.00. Coincidently, we also believe that the total cost (design, construction, construction engineering) to construct the off-site pathway would be about $100,000.00 exclusive of right-of-way costs. Both of these public improvement alternatives have value to the City, but unfortunately, they would also be best coordinated as part of the RCOC reconstruction project. Therefore, we recommend that the Planning Commission consider requiring the following for their PUD approval:

- Request that the developer provide a $100,000.00 donation to the City that will be used towards a public improvement in the vicinity of Avon and Dequindre. The donation could cover cost towards a pathway, PRV construction or possibly another public improvement expense in this area.

- The Redwood developer grant an easement on their property that sufficiently provides coverage for a relocated PRV and water main alignment. The easement should also be able to provide direct access to Dequindre Road.

PMD/

c: Allan E. Schneck, P.E., Director; DPS
Paul G. Shumejko, P.E., PTOE, Transportation Eng. Mgr.; DPS
Tracey A. Balint, P.E., Public Utilities Engineering Mgr.; DPS
Jason Boughton, AC, Engineering Utilities Coordinator; DPS
Russ George, Technician-Permits; DPS
Keith Depp, Project Engineer; DPS
Sara Roediger, AICP, Director; Planning & Economic Development

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Planning and Economic Development
Sara Roediger, AICP, Director

From: Kristen Kapelanski, AICP
Date: 9/11/2019
Re: **Redwood at Rochester Hills (City File 18-022)**
PUD Concept Plan - Planning Review #5

The applicant is proposing an attached housing unit development comprised of 119 residential units on a 29.95-acre site located near the southeast corner of Avon and Dequindre. The project was reviewed for conformance with the City of Rochester Hills Zoning Ordinance. The comments below and in other review letters are minor in nature and can be incorporated into a final site plan submittal for review by staff after review by the Planning Commission.

1. **PUD Requirements** *(Section 138-7.100-108).* The PUD option is intended to permit flexibility in development that is substantially in accordance with the goals and objectives of the City's Master Land Use Plan at the discretion of the City Council. The PUD development shall be laid out so that the various land uses and building bulk will relate to each other and to adjoining existing and planned uses in such a way that they will be compatible, with no material adverse impact of one use on another. The PUD option seeks to:
   - Encourage innovation to provide variety in design layout
   - Achieve economy and efficiency in the use of land, natural resources, energy and the provision of public services and utilities
   - Encourage the creation of useful open spaces
   - Provide appropriate housing, employment, service and shopping opportunities

   The PUD option can permit:
   - Nonresidential uses of residentially zoned areas
   - Residential uses of nonresidential zoned areas
   - Densities or lot sizes that are different from the applicable district(s)
   - The mixing of land uses that would otherwise not be permitted; provided that other objectives are met and the resulting development will promote the public health, safety and welfare

   Review Process
   The PUD review process consists of a two step process as follows:
   a. **Step One: Concept Plan.** The PUD concept plan is intended to show the location of site improvements, buildings, utilities, and landscaping with a level of detail sufficient to convey the overall layout and impact of the development. The PUD concept plan is not intended to demonstrate compliance with all ordinance requirements, but rather is intended to establish the overall layout of the development, including the maximum number of units which may be developed. This step requires a Planning Commission public hearing and recommendation to City Council followed by review by the City Council.
   b. **Step Two: Site Plan/PUD Agreement.** The second step in the process is to develop full site plans based on the approved PUD concept plan and to submit the PUD Agreement. At this time, the plans are reviewed for compliance with all City ordinance requirements, the same as any site plan. This step requires a Planning Commission recommendation to City Council followed by review by the City Council.

Qualification Criteria

Section 138-7.102 sets forth the criteria that a PUD must meet. Each of the criterion are listed below in italics, followed by staff comments on the proposed PUD's compliance with each.

a. The PUD option shall not be used for the sole purpose of avoiding applicable requirements of this ordinance. The proposed activity, building or use not normally permitted shall result in an improvement to the public health, safety, and welfare in the area affected. *The development of smaller rental units provides some diversity in housing stock for the community, which traditionally has been developed with larger subdivision and site condominium lots. Additionally, single story rental units with attached garages allow for a greater diversity of housing options for residents looking to rent but still looking for single-family features, like an attached garage.*

b. The PUD option shall not be utilized in situations where the same land use objectives can be accomplished by the application of conventional zoning provisions or standards. *There are potentially several variances under conventional zoning that may be required including overall density. Through the use of the PUD, the City has the ability to be flexible with regulations in return for development that is above and beyond conventional development.*

c. The PUD option may be used only when the proposed land use will not materially add service and facility loads beyond those contemplated in the master land use plan. The applicant must demonstrate to the satisfaction of the City that the added loads will be accommodated or mitigated by the applicant as part of the PUD. *The Master Plan calls for residential units at 3 units per acre for the property. The proposed residential units are greater than the planned density at 3.97 units per acre, but the Department of Public Services and public safety departments have not expressed a concern regarding impacts to the road system and City utilities. The Engineering Department will conduct a full review of public utility and service needs during step two site plan review.*

d. The PUD shall meet as many of the following objectives as may be deemed appropriate by the City: The PUD is not required to comply with all of the items listed in this criterion; it is up to the judgment of the Planning Commission and City Council to determine if the proposed development provides adequate benefit that would not otherwise be realized. In this instance, it may be the development of a desired land use to provide diversity in housing options in the City.

   1. To preserve, dedicate or set aside open space or natural features due to their exceptional characteristics or their environmental or ecological significance in order to provide a permanent transition or buffer between land uses, or to require open space or other desirable features of a site beyond what is otherwise required in this ordinance. *The site falls under the tree conservation ordinance and contains regulated wetlands and steep slopes. The plans indicate the majority of the regulated wetlands and steep slopes will the preserved. Additional information on wetland and mitigation is provided in the ASTI review dated September 5, 2019. Additional information on tree preservation and impacts is provided later in this review.*
   2. To guarantee the provision of a public improvement that would not otherwise be required to further the public health, safety or welfare, protect existing uses or potential future uses in the vicinity of the proposed development from the impact of a proposed use, or alleviate an existing or potential problem relating to public facilities. *A pathway has been provided along Dequindre Road, as required. Additionally, the applicant has expressed their intention to work with the City on the installation of a pressure reducing valve and the provision of an easement to accommodate the valve. See the engineering review letter dated September 5, 2019 for additional information.*
   3. To promote the goals and objectives of the Master Land Use Plan and other applicable long range plans such as the Master Thoroughfare Plan. *The proposed project promotes the following goals and objectives of the Master Land Use Plan and other applicable long range plans:*
      (a) *Provide a diversity of housing types and sizes to meet the needs of people of different ages, incomes and lifestyles within the community.*
      (b) *Encourage the mixture of residential types of residential uses that are compatible with the established character of the surrounding neighborhood.*
      (c) *Provide a safe, efficient non-motorized pathway system that provides links to various land uses throughout the City.*
   4. To facilitate development consistent with the Regional Employment Center goals, objectives, and design standards in the City's Master Land Use Plan. *Not applicable.*
   5. To preserve and appropriately redevelop unique or historic sites. *Not applicable.*

6. To permanently establish land use patterns that are compatible with or will protect existing or planned uses. *As previously noted, the development of single story rental units at the proposed density at this location is a logical use, providing diversity in housing stock for the community.*
7. To provide alternative uses for parcels that can provide transition or buffers to residential areas and to encourage redevelopment of sites where an orderly transition or change of use is desirable. *The use of the PUD option to provide single story rental units allows for a type of housing that is lacking in the City. A plan that illustrates how the site could be developed under the current zoning district has been provided as a comparison.*
8. To enhance the aesthetic appearance of the City through quality building design and site development. *While significant portions of the site do include front entry garages, the applicant has made an effort to incorporate side entry garages into portions of the site, particularly in those areas facing public rights-of-way.*

The Planning Commission and City Council should only be evaluating the major elements of the development such as density, layout, and building design with the understanding that the details will be reviewed during step 2 of the process, with the burden being on the applicant to maintain compliance with the overall layout and density approved with the PUD Concept Plan.

2. **PUD Concept Plan** *(Section 138-7.105).* The following items must be submitted as part of the PUD concept plan submittal:
   a. Any deed restrictions or restrictive covenants associated with the property.
   b. A written statement explaining in detail the applicant's full intentions under the PUD option including the type of dwelling units or uses contemplated and resulting population, floor area, parking and supporting documentation, including the intended schedule of development.
   c. Written verification from the owner of the property that the applicant is authorized to pursue a PUD.

3. **Zoning and Land Use** *(Section 138-4.300 and 138.7.103).* The site is zoned R-3 One Family Residential District with the MR Mixed Residential Overlay. The applicant would need to develop under the MR Overlay, rezone the site to RM-1 Multiple Family Residential or develop the site with a PUD option. Refer to the table below for the zoning and existing and future land use designations for the proposed site and surrounding parcels.

	Zoning	Existing Land Use	Future Land Use*
Proposed Site	**R-3 One Family Residential with MR Mixed Residential Overlay**	**Vacant single family home**	**Residential 3 with Mixed Residential Overlay**
North	B-2 General Business with MR Mixed Residential Overlay & R-1 One Family Residential	Single Family Home and Bloomer Park	Residential 3 with Mixed Residential Overlay and Park
South	R-3 One Family Residential	Vacant	Landfill
East	B-3 Shopping Center Business with MR Mixed Residential Overlay & R-3 One Family Residential with MR Mixed Residential Overlay	Vacant	Residential 3 with Mixed Residential Overlay
West	R-3 One Family Residential	Vacant	Landfill

*Plan submitted under previous Master Plan for Land Use

4. **Site Design and Layout** *(Section 138-5.100-101, Section 138-8.400-402 and 138-8.500-502).* Refer to the table below as it relates to the area, setback, and building requirements of this project. For purposes of this review, the proposed plan was reviewed in accordance with the requirements of the MR Overlay as that is the most similar zoning district for what is being proposed.

Requirement	Proposed	Staff Comments
Parcel Area 10 acres	29.96 acres	In compliance
Density 3.45 units/acre	3.97 units/acre	**Not in compliance – this standard can be modified as part of the PUD**
Max. Height	20 ft.	In compliance

Requirement	Proposed	Staff Comments
2.5 stories/30 ft.		
Min. Perimeter Front Setback (Dequindre Rd.) 20 ft.	30 ft.	In compliance
Min. Perimeter Front Setback (Avon Rd.) 20 ft.	100 ft. +	In compliance
Min. Perimeter Side Setback 25 ft.	30 ft.	In compliance
Min. Perimeter Rear Setback 60 ft.	50 ft.	**Not in compliance – this standard can be modified as part of the PUD**
Min. Interior Front Setback 15 ft.	23 ft.	In compliance
Min. Interior Side Setback (each/total) 10 ft./20 ft.	10 ft./20 ft.	In compliance
Min. Interior Rear Setback 35 ft.	35 ft.	In compliance
Open Space 5% of gross area developed as active open space = 44,151 sq. ft.	66,750 sq. ft.	In compliance
Garages Min. 1 car garage/unit	2 car garage/unit	In compliance
Entrances/Porches Exterior entrance w/ min. 30 sq. ft. unenclosed front porch	**Min. 22 sq. ft. porch**	**Not in compliance – this standards can be modified as part of the PUD**
Design Features Min. 10% columns, cornices, pediments, articulated bases and/or fluted masonry on front facade	Min. 0%	**Not in compliance – this standard can be modified as part of the PUD**
Windows/doors Min. 25% of wall area facing a street Windows must be recessed or have trim detailing	Min. 21%	**Not in compliance – this standard can be modified as part of the PUD**
Exterior Finishes Max. 33% wood or vinyl siding Max. 10% EIFS	Max. 99.7% (side elevations)	**Not in compliance – this standard can be modified as part of the PUD**
Min. Floor Area 1,250 sq. ft.	Min. 1,713 sq. ft.	In compliance

5. **Exterior Lighting** *(Section 138-10.200-204)*. A photometric plan showing the location and intensity of exterior lighting must be provided as part of all future plan sets. Refer to the table below as it relates to the lighting requirements for this project.

Requirement	Proposed	Staff Comments
Shielding/Glare Lighting shall be fully shielded & directed downward at a 90° angle Fixtures shall incorporate full cutoff housings, louvers, glare shields, optics, reflectors or other measures to prevent off-site glare & minimize light pollution Only flat lenses are permitted on light fixtures; sag or protruding lenses are prohibited	Cut sheets provided	In compliance – porch lighting and landscape lighting only proposed
Max. Intensity (measured in footcandles fc.) 10 fc. anywhere on-site, 1 fc. at ROW, & 0.5 fc. at any other property line	Photometric data provided	In compliance
Lamps Max. wattage of 250 watts per fixture LED or low pressure sodium for low traffic areas, LED, high pressure sodium or metal halide for parking lots	Max. 60 watts	In compliance
Max. Height 20 ft., 15 ft. when within 50 ft. of residential	Building mounted lighting only proposed	In compliance

6. **Parking, Loading and Access** *(138-11.100-308).* Refer to the table below as it relates to the parking and loading requirements of this project.

Requirement	Proposed	Staff Comments
Min. # Parking Spaces Multiple Family: 1.5 spaces per dwelling unit with 2 or fewer bedrooms + 0.2 visitor spaces per dwelling unit = 204	264 spaces	In compliance
Max. # Parking Spaces 200% of Min. = 408 spaces		
Min. Barrier Free Spaces 4 spaces + 3.33% of total parking for 201-300 spaces = 13 spaces	119 ADA spaces in unit garages 1 visitor ADA spaces	In compliance
Min. Parking Space Dimensions 9 ft. x 18 ft. (employee spaces) 10 ft. x 18 ft. (customer spaces) 24 ft. aisle	10 ft. x 18 ft.	In compliance
Min. Parking Setback 10 ft. on all sides	10 ft. +	In compliance
Loading Space No requirement; however, sites shall be designed such that trucks & delivery vehicles may be accommodated on the site		

   a. Pedestrian pathways and sidewalks have been included on the site. In some instances, sidewalks have not been included in all portions of the development due to natural features conflicts and ADA requirements.

7. **Natural Features.** In addition to the comments below, refer to the review letters from the Engineering and Forestry Departments and the City's Wetland Consultant that pertain to natural features protection.
   a. **Environmental Impact Statement (EIS)** *(Section 138-2.204.G)* An EIS meeting ordinance has been submitted for the project.
   b. **Natural Features Setback** *(Section 138-9 Chapter 1).* The site does contain regulated wetlands. See the ASTI letter dated September 5, 2019 for additional information.
   c. **Steep Slopes** *(Section 138-9 Chapter 2).* The site does contain regulated steep slopes. Refer to engineering review letter dated June 27, 2019 for additional comments.
   d. **Tree Removal** *(Section 126 Natural Resources, Article III Tree Conservation).* The site is subject to the city's tree conservation ordinance, and so any healthy tree greater than 6" in caliper that will be removed must be replaced with one tree credit. Trees that are dead or in poor condition need not be replaced. A tree preservation plan has been included indicating the removal of 45 regulated trees. The removal of any regulated tree requires the approval of a tree removal permit and associated tree replacement credits, in the form of additional plantings as regulated in the Tree Conservation Ordinance or a payment of $216.75 per credit into the City's tree fund.
   e. **Wetlands** *(Section 126 Natural Resources, Article IV Wetland and Watercourse Protection).* The site does contain potentially regulated wetlands. Several impacts are proposed to the five wetlands identified on the site. See the ASTI letter dated September 5, 2019 for additional information.
8. **Dumpster Enclosure** *(Section 138-10.311).* Dumpsters are not presently indicated. Trash is collected by a private company at each unit.
9. **Equipment Screening** *(Section 138-10.310.J).* All heating, ventilation and air conditioning mechanical equipment located on the exterior of the building shall be screened from adjacent streets and properties.
10. **Landscaping** *(Section 138-12.100-308).* Refer to the table below as it relates to the landscape requirements for this project. This information is provided to aid the applicant in preparation of step two site plan submittal. **This information based on landscape sheets submitted as part of Planning Review #4.**

Requirement	Proposed	Staff Comments
Right of Way (Avon: 224 ft.) 1 deciduous per 35 ft. + 1 ornamental per 60 ft. = 6 deciduous + 4 ornamental	6 deciduous 4 ornamental	In compliance
Right of Way (Dequindre: 1,090 ft.) 1 deciduous per 35 ft. + 1 ornamental per 60 ft. = 31 deciduous + 18 ornamental	31 deciduous 19 ornamental	In compliance

Requirement	Proposed	Staff Comments
Buffer C (West: 640 ft.) 20 ft. (or 8 ft. with wall) + 2 deciduous + 1.5 ornamental + 4 evergreen + 6 shrubs per 100 ft. = 20 ft. + 13 deciduous + 10 ornamental + 26 evergreen + 38 shrubs	20 ft. + 13 deciduous 10 ornamental 26 evergreen 38 shrubs	In compliance
Buffer C (South: 630 ft.) 20 ft. (or 8 ft. with wall) + 2 deciduous + 1.5 ornamental + 4 evergreen + 6 shrubs per 100 ft. = 20 ft. + 13 deciduous + 9 ornamental + 25 evergreen + 38 shrubs	20 ft. + 13 deciduous 10 ornamental 26 evergreen 38 shrubs	In compliance
Buffer B (North: 978 ft.) 10 ft. + 2 deciduous + 1.5 ornamental + 2 evergreen + 4 shrubs per 100 ft. = 10 ft. + 20 deciduous + 15 ornamental + 20 evergreen + 39 shrubs	10 ft. + 20 deciduous 16 ornamental 20 evergreen 40 shrubs	In compliance
Stormwater Basin A: 490 ft. 6 ft. width + 1.5 deciduous + 1 evergreen + 4 shrubs per 100 ft. = 6 ft. + 7 deciduous + 5 evergreen + 20 shrubs Basins shall be designed to avoid the need to perimeter fencing.	6 ft. + 8 deciduous 5 evergreen 20 shrubs	In compliance
Stormwater Basin B: 490 ft. 6 ft. width + 1.5 deciduous + 1 evergreen + 4 shrubs per 100 ft. = 6 ft. + 7 deciduous + 5 evergreen + 20 shrubs Basins shall be designed to avoid the need to perimeter fencing.	6 ft. + 8 deciduous 5 evergreen 20 shrubs	In compliance
Stormwater Basin D: 275 ft. 6 ft. width + 1.5 deciduous + 1 evergreen + 4 shrubs per 100 ft. = 6 ft. + 4 deciduous + 3 evergreen + 11 shrubs Basins shall be designed to avoid the need to perimeter fencing.	6 ft. + 4 deciduous 3 evergreen 11 shrubs	In compliance
Stormwater Basin E: 220 ft. 6 ft. width + 1.5 deciduous + 1 evergreen + 4 shrubs per 100 ft. = 6 ft. + 3 deciduous + 2 evergreen + 8 shrubs Basins shall be designed to avoid the need to perimeter fencing.	6 ft.+ 3 deciduous 2 evergreen 8 shrubs	In compliance

a. A landscape planting schedule should be provided including the size of all proposed landscaping, along with a unit cost estimate and total landscaping cost summary, including irrigation costs, for landscape bond purposes.
b. If required trees cannot fit or planted due to infrastructure conflicts, a payment in lieu of may be made to the City's tree fund at a rate of $216.75 per tree. Existing healthy vegetation on the site may be used to satisfy the landscape requirements and must be identified on the plans.
c. All landscape areas must be irrigated. This has been noted on the landscape plan. An irrigation plan must be submitted prior to staff approval of the final site plan. A note specifying that watering will only occur between the hours of 12am and 5am has been included on the plans.
d. Site maintenance notes listed in *Section 138-12.109* have been included on the plans.
e. A note stating "Prior to the release of the performance bond, the City of Rochester Hills must inspect all landscape plantings." has been included on the plans.

11. **Architectural Design** *(Architectural Design Standards).* Building elevations have been submitted for several unit types. The majority of those emphasize the garage door as the majority of the front façade which is not the most desirable design option. The City's *Architectural Design Standards* emphasizes this point in *Section 3.2.2 Hierarchy of Massing* which states that "the location of the main body of the house and the human entrance should be easily distinguished. The car entry shall not be the most notable element of the building massing." The applicant has included some side-entry garages interior to the site and the units facing Dequindre will not include garages on the elevations facing Dequindre.

12. **Entranceway Landscaping and Signs.** *(Section 138-12.306 and Chapter 134).* A note has been included on the plans that states that all signs must meet the requirements of the City and be approved under separate permits issued by the Building Department.

ROCHESTER HILLS
MICHIGAN

FIRE DEPARTMENT
Sean Canto
Chief of Fire and Emergency Services

From: William A. Cooke, Assistant Chief / Fire Marshal
To: Planning Department
Date: September 9, 2019
Re: Redwood at Rochester Hills

SITE PLAN REVIEW

FILE NO: 18-022 **REVIEW NO: 5**

APPROVED____X____ **DISAPPROVED_____**

The Fire Department recommends approval of the above reference site plan contingent upon the following conditions being met:

1. A flow test is required to determine if adequate fire flows are available for this development. Please contact the Rochester Hills Engineering Department at (248) 656-4640 to schedule an appointment.

    - A flow test is required prior to final site plan approval.

William A. Cooke
Assistant Chief / Fire Marshal

ROCHESTER HILLS
MICHIGAN

PARKS & NATURAL RESOURCES DEPARTMENT

Ken Elwert, CPRE, Director

To: Kristen Kapelanski, Planning Manager
From: Matt Einheuser, Natural Resources Manager
Date: August 12, 2019
Re: Redwood at Rochester Hills: Review #4
File #18-022

Approved; no comments at this time.

Copy: Maureen Gentry, Economic Development Assistant

ME/ms

ASTI ENVIRONMENTAL

Investigation • Remediation
Compliance • Restoration

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

www.asti-env.com

September 5, 2019

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

Subject: **File No. 18-022 Redwood at Rochester Hills PUD**
Wetland Use Permit Review #5;
Plans received by the City of Rochester Hills on August 27, 2019

Applicant: **Redwood USA, LLC**

Dear Ms. Kapelanski:

The above referenced project proposes to construct 119 residential units on one parcel totaling approximately 30 acres of land. The site is located in the southwest quadrant of the intersection of Avon Road and Dequindre Road. The site includes wetland regulated by the City of Rochester Hills and likely the Michigan Department of Environment, Great Lakes, and Energy (EGLE).

ASTI has reviewed the site plans received by the City on August 27, 2019 (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, King and MacGregor Environmental. ASTI confirmed this wetland delineation in the field on November 30, 2017.

Five wetlands were identified on the property: Wetlands A, B, C, E, and F, all of which are regulated by the City. Portions of Wetlands A, C, and E are proposed to be impacted this project.

Wetland Quality Assessments
Five wetlands were delineated on the property. Quality assessments are as follows:

Wetland A and Wetland E
Wetland A and Wetland E were delineated as separate wetlands. However, Wetland A and Wetland E exhibit a direct surface hydrologic connection and are connected subsurface. Therefore, these two wetlands will be considered the same wetland complex for the purposes of this review.

Located in the central portion of the property, Wetland A/E is a forested, scrub/shrub, and emergent wetland comprised of vegetation of generally low ecological floristic quality. Vegetation within the forested portion of Wetland A/E, which is located in the extreme western on-site extent, was dominated by the native species of silver maple (*Acer saccharinum*), cottonwood (*Populus deltoides*), and American elm (*Ulmus americana*). Canopy within the forested portion was estimated at 70-80% and trees were generally mature. Vegetation within the scrub/shrub portion, which is located in the extreme eastern extent, was dominated by the common native species of sand bar willow (*Salix interior*), silky dogwood (*Cornus amomum*), pussy willow (*Salix discolor*), and the invasive species reed canary grass (*Phalaris arundinacea*). The emergent portion of Wetland A/E, which comprised the majority of this wetland complex, was dominated by the native species of lake bank sedge (*Carex lacustris*) and the invasive species Phragmites (*Phragmites australis*). Mean vegetation cover within the entirety of Wetland A/E was estimated at approximately 100% with an approximate total native species cover of 40% and approximate invasive species cover of 60%. Wetland hydrology is mainly supplied to Wetland A/E from ground water seepage from the west. Exposed and active groundwater flows and surface water was observed throughout this wetland complex on the day of ASTI's site inspection. Wetland A/E provides direct ground water filtration, groundwater recharge, and surface water detainment enhancing ground and surface water quality prior to entering the Clinton River to the east via a road ditch system along Dequindre Road. Soils were comprised of sandy loams and muck and appeared to be relatively undisturbed since approximately 1990 based on historical aerial photography review. The vegetation within Wetland A/E is dominated by invasive species, but does contain significant amounts of native species. Wetland A/E provides some of the last remaining natural water filtration and detainment functions in close proximity to the Clinton River near the property and should be considered an important natural resource of the City per the City's Wetland and Watercourse Protection Ordinance.

Wetland B
Wetland B is a small and isolated emergent wetland in the north central portion of the property, which exhibited vegetation dominated by reed canary grass. Wetland B likely detains small amounts of storm water from precipitation events and ponding; no surface water or ground water was observed. Wetland B appears to be the result of historic grading activities to the north. Soils were comprised of sandy loams and appeared relatively undisturbed. Wetland B is dominated by invasive species and is small and isolated, which reduces its potential to provide significant natural resource functions. Therefore, it is ASTI's opinion that Wetland B is of low ecological value and function and should not be considered an important natural resource to the City.

Wetland C
Wetland C is a forested and emergent wetland located in the north/northwest portion of the property. Vegetation within the forested portion of Wetland C, which is located in the western half of this complex on-site, was dominated by the common native species of box elder (*Acer negundo*), green ash (*Fraxinus pennsylvanica*), cottonwood, and the invasive species of glossy buckthorn (*Frangula alnus*). Canopy within the forested portion was estimated at 60-70% and trees were generally young. Vegetation within the emergent portion was dominated by the native species of lake bank sedge and common rush (*Juncus effusus*). Mean vegetation cover within the entirety of Wetland C was estimated at approximately 100% with an approximate total native species cover of 70% and approximate invasive species cover of 30%. Wetland hydrology is mainly supplied to Wetland C from ground water seepage from the west. Exposed and active groundwater flows and surface water was observed throughout this wetland complex on the day of ASTI's site inspection. Wetland C provides direct ground water filtration and surface water detainment, enhancing ground and surface water quality prior to entering the Clinton River to the east via off-site wetlands that empty directly into the Clinton River through a culvert beneath Dequindre Road. Soils were comprised of sandy loams and muck and appeared to be relatively undisturbed since approximately 1990 based on historical aerial photography review. The vegetation within Wetland C is dominated by native species, but does contain significant amounts of invasive species. However, Wetland C provides some of the last remaining natural water filtration and detainment functions in close proximity to the Clinton River near the property and should be considered an important natural resource of the City.

Wetland F
Wetland F is an emergent wetland located in the south central portion of the property. Vegetation within Wetland F was dominated by the invasive species of Phragmites and reed canary grass. Mean vegetation cover within Wetland F was estimated at approximately 100% with an approximate total native species cover of approximately 20% and approximate invasive species cover of 80%. Wetland hydrology is supplied to Wetland F from ground water seepage from the west.

Exposed and active groundwater flow and surface water was observed in this wetland complex on the day of ASTI's site inspection. Wetland F provides direct ground water filtration and surface water detainment, enhancing ground and surface water quality prior to entering the Clinton River to the south via an off-site watercourse system that empties directly into the Clinton River. Soils were comprised of sandy loams and muck and appeared to be relatively undisturbed since approximately 1990 based on historical aerial photography review. The vegetation within Wetland F is dominated by invasive species. However, Wetland F provides some of the last remaining natural water filtration and detainment functions in close proximity to the Clinton River in the area of the property and should be considered an important natural resource of 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 on the Current Plans as well as all alpha-numeric wetland flagging as applied in the field. The Current Plans show the wetland delineation for this site was completed on October 18, 2019, which is to ASTI's satisfaction. 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. All wetland on the site is regulated by the City and likely EGLE. Wetland A/E is regulated by the City and likely EGLE because it exhibits a direct surface water connection to the Clinton River. Wetland B is regulated by the City and likely EGLE because it is within 500 feet of the Clinton River. Wetland C is regulated by the City and likely EGLE because it exhibits a direct hydrologic connection to the Clinton River. Wetland F is regulated by the City and likely EGLE because it exhibits a direct hydrological connection to an off-site watercourse system, which is directly connected to the Clinton River.

   c. The Current Plans show that 3,898 square feet of permanent wetland impacts and 2,862 square feet of temporary impacts will occur in the eastern portion of Wetland A/E from the construction of a residential drive over the existing earthen pathway and an associated retaining wall at Wetland A/E. Wetland A/E is of low floristic quality in this area, however, this wetland functions as a direct groundwater recharge area and water filtration medium for the Clinton River to the east. The existing earthen path within Wetland A/E does not currently appear to affect the flow of ground water seepage or overland flows as observed during ASTI's November 30, 2018 site inspection. Any proposed development should avoid adversely affecting natural surface and ground water flows associated with this wetland complex. Sheet C605

of the Current Plans shows a 24-inch storm sewer pipe beneath the proposed drive associated with Wetland A/E. It is ASTI's opinion that the proposed culvert will allow adequate ground water seepage and overland flow between the two wetland areas upon completion. Additionally, the Current Plans show a note stating that any temporary impact areas are to be restored to original grade with original soils or equivalent soils and seeded with a City-approved wetland seed mix and that restoration of any temporary wetland impacts will be subject to inspection by the City and ASTI upon completion. This is all to ASTI's satisfaction.

d. The Current Plans show that 3,242 square feet of permanent wetland impacts and 1,691 square feet of temporary wetland impacts will occur in the northern portion of Wetland C from the construction of a residential access drive connecting to Avon Road. This portion of Wetland C is forested and of low floristic quality. However, Wetland C is an active ground water seep area directly connected to the Clinton River. Sheet C605 of the Current Plans shows three 12-inch storm sewer pipes spaced approximately 30-45 feet within 81 feet of the proposed drive from Avon Road within Wetland C. It is ASTI's opinion that this strategy should allow the current volumes and dissipation of natural groundwater seepage from the west to adequately flow through the entirety of the remaining portion of Wetland C east of the access drive. This plan should maximize water dissipation throughout Wetland C and minimize the chances of channelization, excess erosion, and drying out of areas within Wetland C not proposed for wetland impacts. Additionally, the Current Plans state that any temporary impact areas are to be restored to original grade with original soils or equivalent soils and seeded with a City-approved wetland seed mix. Restoration of any temporary wetland impacts will be subject to inspection by the City and ASTI upon completion. This is all to ASTI's satisfaction.

e. The Current Plans show proposed grading could impact the southwest portion of Wetland C northwest of Unit 1, Wetland E south of Detention Pond 1, south of Unit 18, and south of Unit 31, and Wetland A south of Unit 54 and south of Detention Pond 2. These impacts are small and will not likely alter the current natural functions of these wetlands. ASTI was notified by the Applicant that no wetland impacts are to occur in these areas prior to this review. A note on the proposed grading plan within the Current Plans states "Unless otherwise noted, all grading activities and limits of work are to terminate outside of the wetland areas." This is to ASTI's satisfaction. The Applicant should be aware that any unplanned temporary or permanent wetland impacts on-site will require immediate restoration and will be subject to City inspection and potential EGLE corrective actions.

f. In ASTI's first plan review of this project, it was recommended that plans should show a retaining structure, such as a 1-2 feet high fieldstone boulder wall, around all remaining on-site portions of Wetland A/E and Wetland C, where applicable, to ensure no future unplanned impacts to these wetlands occur. The Applicant has

offered a description and photograph of a proposed 1-2 feet high fieldstone wall in their response letter to the City dated August 26, 2019, which is to ASTI's satisfaction. Please note that final wall standards and construction will be subject to final City approval. The Current Plans show a retaining wall in the areas of proposed impact of Wetland C and Wetland A/E near proposed Units 40-44, units 82-85, and the road between Wetland A and Wetland E. This is to ASTI's satisfaction. The Applicant has requested that signage be placed along the remaining areas of Wetland on-site to discourage secondary impacts post-construction. ASTI agrees that this should help minimize unplanned activities such as, mowing, planting, clearing, etc. Signs should state that no construction or placement of structures, mowing, cutting, dredging, or the application of chemicals are allowed. Signs should be of an adequate size to be easily observed by residents. These actions should help minimize unplanned adverse effects to remaining wetland on-site from mowing, clearing, etc., as prescribed and would be in harmony with the City's PUD development standards. Final plans must show a detail of the proposed retaining wall and signage for City review.

g. The Current Plans show two 12-inch storm sewer pipes emptying into Wetland E; one from Detention Pond 1 and one from Detention Pond 3, and one 12-inch storm sewer pipe emptying into Wetland A from Detention Pond 2.

   These proposed actions 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. 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. These actions will require a Part 303 permit from EGLE, which must be obtained and submitted to the City for review.

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 likely Part 303 Permit from EGLE are required for this project as proposed. Once an EGLE 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 and impact areas if the City does not waive Natural Feature Setback regulations. The Current Plans show Natural Features Setback impacts in linear feet 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

Dianne Martin
Vice President
Professional Wetland Scientist #1313

WRC

WATER RESOURCES COMMISSIONER

Jim Nash

November 27, 2018

Kristen Kapelanski
City of Rochester Hills
1000 Rochester Hills Drive
Rochester Hills, MI 48309

Reference: **Redwood at Rochester Hills, CAMS #201801369**
Part of the SE ¼ of Section 13, City of Rochester Hills

Dear Ms. Kapelanski,

This office has received one set of plans for the Redwood at Rochester Hills Project to be developed in the Southeast ¼ of Section 13, City of Rochester Hills.

Our stormwater system review indicates that the proposed project will not have an involvement with any legally established County Drain. Therefore, a storm drain permit will not be required from this office.

The water system is operated and maintained by the City of Rochester Hills and plans must be submitted to the City of Rochester Hills for review.

The sanitary sewer is within the Clinton Oakland Sewage Disposal System. Any proposed sewers of 8" or larger may require a permit through this office.

Any related earth disruption must conform to applicable requirements of Part 91, Soil Erosion and Sedimentation Control of the Natural Resource and Environmental Protection Act, Act 451 of the Public Acts of 1994. Applications should be submitted to our office for the required soil erosion permit.

Please note that all applicable permits and approvals from federal, state or local authorities, public utilities and private property owners must be obtained.

If there are any questions regarding this matter, please contact Dan Butkus at 248-858-2089.

Sincerely,

Glenn R. Appel., P.E.
Chief Engineer

GRA/DFB

One Public Works Drive • Building 95 West • Waterford, MI 48328-1907
Phone: 248.858.0958 • Fax: 248.858.1066 • www.oakgov.com/water

ROAD COMMISSION for OAKLAND COUNTY
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ROAD COMMISSION FOR OAKLAND COUNTY
"WE CARE."

January 11, 2019

City of Rochester Hills
Attn: Kristen Kapelanski
1000 Rochester Hills Drive
Rochester Hills, MI 48309

Department of
Customer Services
Permits

2420 Pontiac Lake Road
Waterford, MI 48328

248-858-4835

FAX
248-858-4773

TDD
248-858-8005

www.rcocweb.org

RE: R.C.O.C. PRELIMINARY PLAN REVIEW 18P0052
LOCATION: AVON RD/DEQUINDRE RD, ROCHESTER HILLS
PROJECT NAME: REDWOOD AT ROCHESTER HILLS

Dear Ms. Kapelanski:

At your request, the Road Commission for Oakland County (RCOC) has completed a preliminary review for the above referenced project. Enclosed you will find one set of plans with our comments in red. All comments are for conceptual purpose only and should be incorporated into detailed construction plans. Below you will find a listing of the comments generated by the RCOC review:

A) Construction schedule and design shall be coordinated with, so as not to disrupt, GLWA's 96-inch water transmission main relocation project within Dequindre Rd.
B) The RCOC Master ROW Plan indicates a 60-foot wide half width ROW for Avon Rd and Dequindre Rd. The existing ROW is shown to be 33-foot wide half width. Please contact Mike Smith, Right-of-Way Supervisor, at (248) 645- 2000 to discuss dedicating the ROW or establishing a dedicated highway easement.
C) As part of the drive approach construction, a center left turn lane (CLTL) should be constructed on Avon Rd & Dequindre Rd. The plans should include the entire widening, including Decel/Accel lane and tapers, with detailed proposed grades included.
D) Driveway must have sufficient corner sight distance (see attached RCOC policy).
E) Drive approach should include a detail M curb line to provide controlled drainage across the driveway.
F) Pavement cross section shall consist of a minimum 2 inches of MDOT 4C HMA, over 3 inches of 3C, over 4 inches of 2C, or 9 inches of MDOT 35-P concrete, with epoxy coated rebar lane and curb ties over a suitable base, as determined in the field by RCOC.
G) Any guardrail work must be performed by an MDOT pre-qualified guardrail contractor. Fixed objects shall be no nearer than 5 feet from the back of curb, or 12 feet from the lane line.
H) Excavations within a 1:1 influence of the roadway will require MDOT Class II backfill compacted to 95% maximum density.
I) Adjust/reconstruct existing structure as warranted.

J) Site runoff detention system shall be sized to accommodate the 100-year storage volume, and restricted to outlet 0.2 cfs per acre, with a minimum restrictor diameter of 4 inches.

Once the comments above are addressed, plans should be submitted to this office with completed RCOC permit application(s) Form 64a, signed by the owner (or his agent), three sets of plans (per application, 5 for signal permit) and the appropriate application fee(s).

All future correspondence related to the above referenced project will be sent to the address provided by the applicant. Separate applications will be required for:

a) Drive approach & road improvements
b) Utility connections

Upon receipt of the appropriate application packet, RCOC will provide a more detailed review. Please contact this office at (248) 858-4835 if you have any questions, or if we may be of further assistance.

Respectfully,

Scott Sintkowski, P.E.
Permit Engineer
Department of Customer Services

SS/mc
Enclosure

ROCHESTER HILLS
MICHIGAN

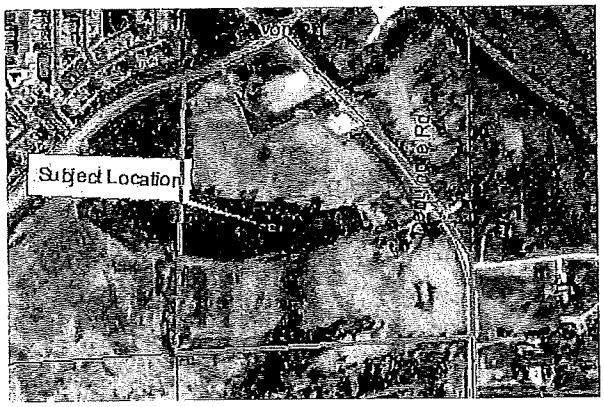
CITY OF ROCHESTER HILLS
1000 Rochester Hills Drive
Rochester Hills, MI 48309

NOTICE OF PUBLIC HEARING
ROCHESTER HILLS PLANNING COMMISSION

REQUEST: In accordance with the Michigan Zoning Enabling Act, PA 110 of 2006, as amended, and Section 138-1.203 and 138-7.105 of the Code of Ordinances of the City of Rochester Hills, a Public Hearing is required to review the application for a Preliminary Planned Unit Development (PUD) and conceptual Site Plan Recommendation for Redwood at Rochester Hills, a proposed residential development consisting of 119 units on 25.95 acres, identified as Parcel No. 15-13-476-005 (City File No. 18-022).

LOCATION: Near southwest corner of Avon and Dequindre Roads

APPLICANT: Richard Batt
Redwood USA, LLC
7510 East Pleasant Valley Rd.
Independence, OH 44131



DATE OF PUBLIC HEARING: Tuesday, October 15, 2019 at 7:00 p.m.

LOCATION OF PUBLIC HEARING: City of Rochester Hills Municipal Offices
1000 Rochester Hills Drive
Rochester Hills, Michigan 48309

Information concerning this request may be obtained from the Planning Department during regular business hours from 8:00 a.m. to 5:00 p.m., Monday through Friday, or by calling (248) 656-4660. Written comments concerning this request will be received by the City of Rochester Hills Planning Department, 1000 Rochester Hills Drive, Rochester Hills, Michigan 48309, prior to the public hearing or by the Planning Commission at the public hearing. The plans can also be found at rochesterhills.org, city government, maps, planning & economic dev., development projects. The recommendation will be forwarded to City Council after the Public Hearing.

Deborah Brnabic, Chairperson
Rochester Hills Planning Commission

NOTE: Anyone planning to attend the meeting who has need of special assistance under the Americans with Disabilities Act (ADA) is invited to contact the Facilities Division (248-656-2560) 48 hours prior to the meeting. Our staff will be pleased to make the necessary arrangements.