






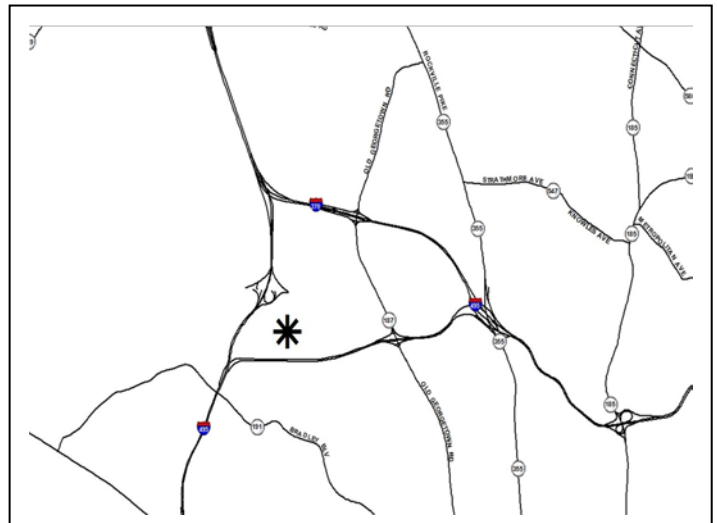
WMAL Bethesda, Preliminary Plan No. 120160290

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Description

Staff Report Date: 6-5-17

- Request to subdivide the Subject Property into 309 lots (159 one-family detached, 150 one-family attached), one parcel dedicated to MCPS, and various stormwater management, common open space, private road, and HOA parcels;
- Located within the northeast quadrant of the intersection of Greentree Road and Interstate 495, within the *North Bethesda/Garrett Park Master Plan* area;
- 74.83 acres in the R-90 Zone, Optional Method Development (12.5% MPDUs + 1 MPDU);
- Subdivision Regulations in effect on February 12, 2017;
- Applicant: Toll Brothers Inc.;
- Filing Date: June 21, 2016.



Summary

- Staff recommends approval of the Preliminary Plan with conditions.
- If approved, the proposed lots will be served by a network of public and private streets. Per Section 50-29(a)(2); the Planning Board will need to find the private streets to have attained the status of public streets.
- The Preliminary Plan will establish the approximate lot and block layout, public and private rights-of-way, common open space areas, master plan conformance, preliminary forest conservation plan and tree variance, adequate public facilities, and the approved stormwater management concept.
- In order to utilize the Optional Method of Development, the Applicant is required to provide more than the minimum number of required MPDUs 12.5%, thus the Applicant is providing 12.5% + 1 additional MPDU.
- Staff has received several community concerns throughout the review of this plan, has incorporated those concerns in this report, and attached written correspondence received.
- On June 2, 2017, the Applicant made a request for a 10-year APF Validity Period. Staff does not support this request.

PRELIMINARY PLAN RECOMMENDATION AND CONDITIONS

Staff recommends approval of Preliminary Plan No. 120160290 subject to the following conditions:

1. Approval is limited to 309 lots (159 one-family detached lots, 150 one-family attached lots) of which a minimum of 12.5% + one additional lot must be moderately priced dwelling units (MPDUs), one 4.3-acre parcel to be dedicated to Montgomery County Public Schools (MCPS), and associated stormwater management, common open space, private roads, and homeowners association (HOA) parcels. Final number of MPDUs to be determined at Site Plan.
2. The Applicant must revise the variance request so that it no longer includes tree #158, a 27" Eastern Red Cedar.
3. The Applicant must comply with the conditions of approval for the Preliminary Forest Conservation Plan No. 120160290, approved as part of this Preliminary Plan, subject to the following conditions:
 - a. The Applicant must record a Category I Conservation Easement over all areas of forest retention, forest planting and environmental buffers as specified on the approved Preliminary Forest Conservation Plan. The Category I Conservation Easement must be approved by the M-NCPPC Office of the General Counsel and recorded in the Montgomery County Land Records by deed prior to the start of any demolition, clearing, or grading on the Subject Property, and the Liber Folio for the easement must be referenced on the record plat.
 - b. At the time of Site Plan submittal, the Applicant must submit a Final Forest Conservation Plan("FFCP"), consistent with the approved Preliminary Forest Conservation Plan("PFCP").
 - c. The FFCP must include detailed and specific tree protection measures for on and off-site trees affected by the Limits of Disturbance (LOD).
 - d. The FFCP must include fencing and signage along areas of forest retention and planting.
 - e. The FFCP must include mitigation plantings for the removal of five (5) trees located outside of existing forest stands and subject to the variance provision. Native canopy trees must be planted totaling 43 caliper inches, with a minimum planting stock size of three (3) caliper inches. The trees must be planted on the Property, in locations to be shown on the Final Forest Conservation Plan, outside of any rights-of-way, or utility easements, including stormwater management easementsAll other trees subject to the variance provision are within existing forest stands and will be mitigated per Chapter 22A.
4. The Applicant must provide noise mitigation for the proposed residential units with final timing and details of features/structures to be determined at Site Plan. The Applicant shall cooperate, including sharing studies, with the Maryland State Highway Administration (SHA) and Staff in connection with SHA's evaluation of a noise mitigation solution that benefits the existing community adjacent to I-270.
5. The Applicant must dedicate, and the record plat must reflect, the Master Plan recommended 70-foot right-of-way for Greentree Road and Greyswood Road as identified by the North Bethesda/Garrett Park Master Plan and shown on the Preliminary Plan.
6. The Applicant must dedicate, and the record plat must reflect, the 60-foot right-of-way for Renita Lane between Greentree Road to Private Street 3, as shown on the Preliminary Plan.
7. The Applicant must dedicate, and the record plat must reflect, the 29-foot four-inch right-of-way for Renita Lane between Private Street 3 and Private Street 1, as shown on the Preliminary Plan.

8. The Applicant must dedicate, and the record plat must reflect, the 27-foot four-inch right-of-way for Renita Lane between Private Street 1 and existing Renita Lane, as shown on the Preliminary Plan.
9. The Applicant must construct all road improvements within the rights-of-way shown on the approved Preliminary Plan to the full width mandated by the Master Plan and/or to the design standards imposed by all applicable road codes.
10. The Applicant must provide Private Street(s) 1-8, Alleys 1-12, and Lanes A-F, including any sidewalks, bikeways, storm drainage facilities, street trees, street lights, private utility systems and other necessary improvements as required by either the Preliminary Plan or the subsequent Site Plan within the delineated private road area (collectively, the "Private Road"), subject to the following conditions:
 - a. The record plat must show the Private Road in a separate parcel.
 - b. The Private Road must be subject by reference on the plat to the Declaration of Restrictive Covenant for Private Roads recorded among the Land Records of Montgomery County, Maryland in Book 54062 at Page 338.
 - c. Prior to issuance of a building permit, the Applicant must deliver to the Planning Department, with a copy to the Montgomery County Department of Permitting Services (DPS), certification by a professional engineer licensed in the State of Maryland that the Private Roads have been designed and the applicable building permits will provide for construction in accordance with the paving detail and cross-section specifications required by the Montgomery County Road Code, as may be modified on this Preliminary Plan or a subsequent Site Plan, and that each road has been designed for safe use including horizontal and vertical alignments for the intended target speed, adequate typical section(s) for vehicles/pedestrians/bicyclists, ADA compliance, drainage facilities, sight distances, points of access and parking, and all necessary requirements for emergency access, egress, and apparatus as required by the Montgomery County Fire Marshal.
11. The Applicant must dedicate to MCPS 4.3 acres of land adjacent to Greentree Road as shown on the Preliminary Plan in accordance with Section 52-58 of the Montgomery County Code. The density attributable to the 4.3-acre parcel (19 dwelling units) shall be excluded from the density calculation of the development resulting in a total of 309 units on the remaining 70.53 acres. The exact boundaries of the conveyance must be shown on the record plat. As part of the dedication agreement, the Applicant and MCPS shall determine what improvements will be made to the parcel (e.g. rough grading, tree removal) and under what conditions the Applicant may utilize a portion of the parcel for staging for the approved development. Per Section 52-58, the timing of the dedication will be determined by MCPS and the Applicant.
12. The record plat must reflect common ingress/egress and utility easements over all shared driveways.
13. The record plat must reflect a common use and access easement for the benefit of the public over all trails, sidewalks and paths not included in a public right-of-way or private street parcel. The easement must be created by a deed approved by the M-NCPPC Office of the General Counsel and recorded in the Montgomery County Land Records.
14. The record plat must reflect all areas under Homeowners Association ownership and specifically identify stormwater management parcels.
15. The record plat must reference the Common Open Space Covenant recorded at Liber 28045 Folio 578 ("Covenant"). The Applicant must provide verification to Staff prior to release of the final building permit that the Applicant's recorded HOA documents incorporate the Covenant by reference.

16. The Applicant must provide a streetscape plan for Greentree Road and Greyswood Road (from Fernwood Road to the intersection of Greentree Road and I-495) at the time of site plan. The streetscape plan must include, at a minimum, tree plantings from the Property to Fernwood Road and bump-outs at the Greyswood Road intersections with Harrogate Road and Inglemere Drive, to be designed so as not to interfere with existing utilities or infrastructure. Final details of the streetscape plan to be determined at Site Plan.
 17. The Planning Board accepts the recommendations of the Montgomery County Department of Transportation ("MCDOT") in its letter dated May 2, 2017, and hereby incorporates them as conditions of the Preliminary Plan approval. The Applicant must comply with each of the recommendations as set forth in the letter, which may be amended by MCDOT provided that the amendments do not conflict with other conditions of the Preliminary Plan approval.
 18. Prior to recordation of plat(s), the Applicant must satisfy the provisions for access and improvements as required by MCDOT.
 19. The Planning Board accepts the recommendations of the Montgomery County Department of Permitting Service ("MCDPS") – Water Resources Section in its stormwater management concept letter dated May 1, 2017, and hereby incorporates them as conditions of the Preliminary Plan approval. The Applicant must comply with each of the recommendations as set forth in the letter, which may be amended by MCDPS – Water Resources Section provided that the amendments do not conflict with other conditions of the Preliminary Plan approval.
 20. The Planning Board accepts the recommendations of the MCDPS, Fire Department Access and Water Supply Section in its letter dated April 11, 2017, and hereby incorporates them as conditions of approval. The Applicant must comply with each of the recommendations as set forth in the letter, which MCDPS may amend if the amendments do not conflict with other conditions of Preliminary Plan approval.
 21. No clearing or grading of the site, or recording of plats, prior to certified site plan approval.
 22. Prior to issuance of any building permits for dwelling units, all radio towers, equipment, and associated materials must be removed from the site.
 23. Final approval of the number and location of buildings, dwelling units, on-site parking, site circulation, sidewalks, and paths will be determined at site plan.
 24. If a subsequent site plan approval substantially modifies the subdivision shown on the approved Preliminary Plan with respect to lot configuration, right-of-way width, or alignment, the Applicant must obtain approval of a Preliminary Plan amendment prior to certification of the Site Plan.
 25. The Certified Preliminary Plan must contain the following note: "Unless specifically noted on this plan drawing or in the Planning Board conditions of approval, the building footprints, building heights, on-site parking, site circulation, and sidewalks shown on the Preliminary Plan are illustrative. The final locations of buildings, structures and hardscape will be determined at the time of Site Plan review. Please refer to the zoning data table for development standards such as setbacks, building restriction lines, building height, and lot coverage for these lots. Other limitations for site development may also be included in the conditions of the Planning Board's approval."
 26. All necessary easements must be shown on the Record Plat.
 27. The Adequate Public Facility (APF) review for the Preliminary Plan will remain valid for sixty-one (61) months from the date of mailing of the Planning Board Resolution.
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TABLE OF CONTENTS

SECTION 1: CONTEXT AND PROPOSAL	6
SITE DESCRIPTION	6
PROJECT DESCRIPTION	7
Background	
Proposed Project	
Community Outreach	
SECTION 2: PRELIMINARY PLAN REVIEW	17
Master Plan Conformance	17
Public Facilities	20
Environment	31
Compliance with the Subdivision Regulations and Zoning Ordinance	42
ATTACHMENTS	46
1. Concept Plan	
2. Initial Submittal of the Preliminary Plan	
3. Current/Proposed Preliminary Plan	
4. Community Correspondence – Documents	
5. Letter from Montgomery County Parks	
6. Community Correspondence – Traffic Study/Transportation	
7. Applicable Master Plan Sections	
8. Applicant Response to Community’s Traffic Study/Traffic Concerns	
9. Bill 37-16, which Amends Section 52-58 of the Montgomery County Code	
10. Email from Parks Staff	
11. Applicant’s 10-year APF Request	
12. Preliminary Forest Conservation Plan submitted for PB approval	
13. Applicant’s Variance Request	
14. Noise Analysis	
15. Agency Letters	
16. Applicant’s Private Road Justification Letter	
17. Letter from MCPS	
18. Community Correspondence – Emails	

SECTION 1: CONTEXT AND PROPOSAL

SITE DESCRIPTION

The Subject Property (Property) outlined in red below and known as the WMAL Property, is approximately 74.83 acres in size, and located in the northeast quadrant of the intersection of Interstate I-495 and Greentree Road. It is primarily surrounded by single-family detached and attached homes to the east, north, and west, and borders I-495 to the south. Stratton Woods Local Park is located approximately ¼ mile to the northeast of the Property.



Figure 1: Vicinity Map

The Property is zoned R-90, is within the 1992 *North Bethesda/Garrett Park Master Plan*, and currently contains three radio towers that formerly supported the WMAL radio station. A single-family detached structure that housed radio and maintenance equipment was recently demolished.



Figure 2: Site

The Property is located in the Cabin John Creek Watershed Class I-P. There are no known rare, threatened, or endangered species on site. The Property contains approximately 15.84 acres of forest, as well as a short segment of an intermittent stream and a small wetland with their associated buffers. The Natural Resource Inventory/Forest Stand Delineation (NRI/FSD), plan number 420160220, was approved on November 9, 2015.

PROJECT DESCRIPTION

Background

Concept Plan

The Applicant initially submitted a Concept Plan (Attachment 1) for review that proposed 328 dwelling units served entirely by private roads, more forest clearing than what is currently proposed, no access from Renita Lane, and Common Open Space (COS) areas that, although concentrated in the center of the site, were fragmented and surrounded by roads on all sides. Staff had several concerns with the Applicant's proposal and provided comments, with the primary concerns including:

- Amount of forest being cleared for development;
- Lot and private roads layout;
 - All roads were proposed as private roads;
- COS areas surrounded by roads;
- Location/size of stormwater management (SWM) facilities were not shown;

- The lack of a Master Plan recommended road connection between Greentree and Greyswood Road; and
- Changes needed for Renita Lane:
 - Three remote points of access required by the Montgomery County Fire and Rescue Services Section (Fire and Rescue) of DPS; and
 - Both MCDOT and Planning Staff find that more efficient pedestrian and vehicular circulation is provided by extending Renita Lane.

Proposed Project

Preliminary Plan

Initial Submittal

The Applicant's initial Preliminary Plan (Attachment 2) proposed 328 lots (170 single-family detached and 158 single-family attached) pursuant to the Moderately Priced Dwelling Unit (MPDU) Optional Method of Development in the R-90 Zone, with an outdoor pool and clubhouse, and various SWM, private road, COS, conservation, and homeowners association (HOA) parcels. This initial submittal addressed Staff's previous concerns regarding the master-planned road connection between Greentree and Greyswood Roads, the proposed layout of streets, the third remote point of access from Renita Lane, and the COS incorporation into the layout as an extension of the proposed blocks. However, concerns remained about the amount of proposed forest clearing, the fact that all roads were still proposed as private roads, nearly all the COS areas were significantly encumbered by the location and size of the SWM facilities, and the proposed noise wall along the northern property boundary, which would create a significant physical and visual divide between the existing neighborhood and proposed development. Subsequent to the initial submittal of the Preliminary Plan, the Applicant worked through several meetings and iterations of the Preliminary Plan with Staff and community representatives.

Current Submittal

The Applicant's current Preliminary Plan (Attachment 3) proposes to subdivide the Property into 309 lots comprising 159 single-family detached units and 150 single-family attached units, of which a minimum of 12.5% + 1 lot must be moderately priced dwelling units (MPDUs), one 4.3-acre parcel to be dedicated to Montgomery County Public Schools (MCPS), and associated stormwater management, common open space, private road, and homeowners association (HOA) parcels. The 309 lots will be located on the remaining 70.53 acres (75.83 acres – 4.3 acres MCPS school site), and the final number of MPDUs will be determined at site plan. The Applicant is providing the one additional MPDU in order to utilize the Optional Method of Development in the R-90 Zone.

By using the Optional Method of development, the Applicant is able to cluster the majority of the units in the interior of the Property. This is more desirable from an environmental perspective because it allows the Property to develop while minimizing the impacts of the proposed development on the existing forest on the northern and southern portions of the Property. The Applicant proposes to retain two separate forest stands, totaling approximately 10.75 acres in size, and place them into Category I Forest Conservation Easements. These areas are proposed to be activated with a natural surface trail, and are, therefore, also counted as COS areas. Placing the forest stands in conservation easements and providing natural surface trails through them preserves a significant portion of the Property's existing green area and forest, while offering opportunities for active and passive recreation. In addition to the forest conservation and COS areas, the Applicant is proposing to convey/dedicate a 4.3-acre school site to MCPS. The proposal includes a network of sidewalks and trails throughout the development and COS areas to provide connectivity and recreational opportunities for the proposed development and existing neighborhood. The proposed layout also creates open spaces sized to accommodate amenities such as

several decorative sitting areas, an approximately 10,000 square-foot open play area, an approximately 4,000 square-foot community center/club house with an outdoor pool, a tot lot located close to a cluster of MPDU townhomes, and a series of centrally located linear parks, with the final size, location, and design to be determined at Site Plan. The Applicant proposes to provide two public road extensions: Greentree Road to Greyswood Road, and Renita Lane to Greentree Road. Internally, the proposed development will be served by a network of local private streets.

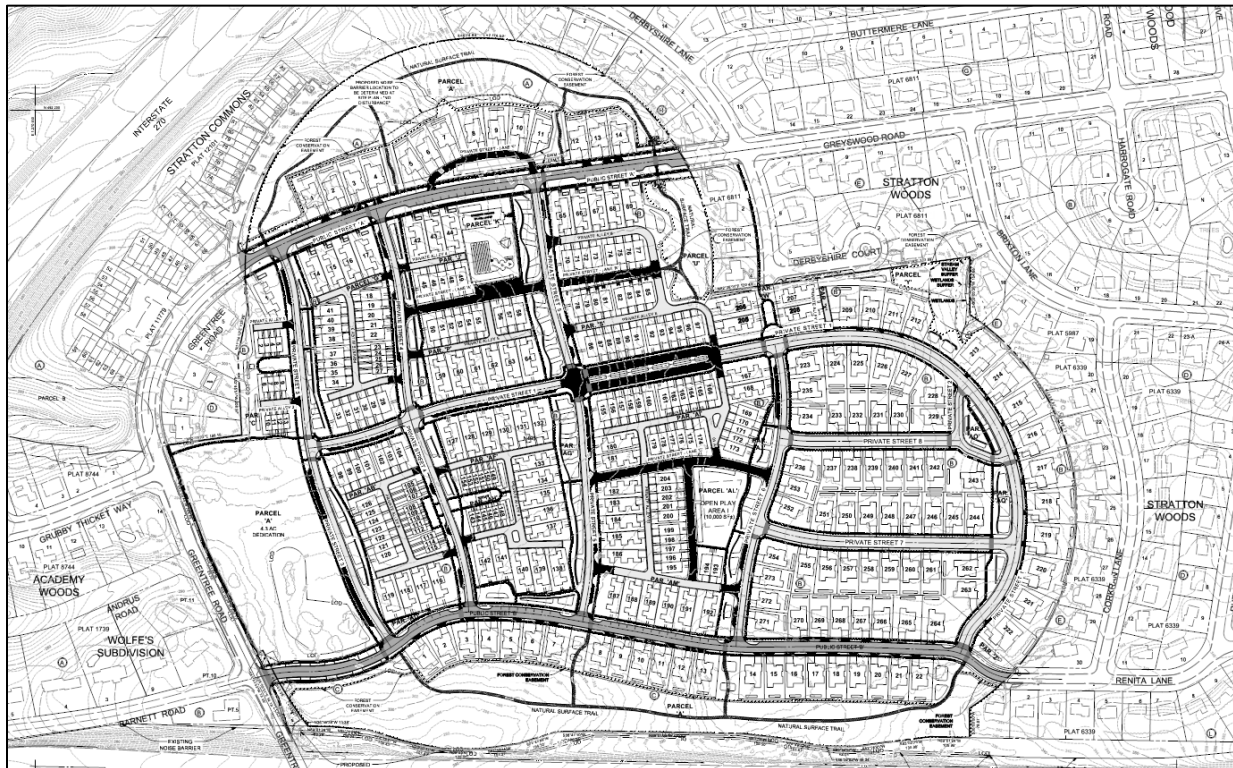


Figure 3: Proposed Preliminary Plan

Community Outreach

The Applicant has met all proper signage, noticing, and submittal requirements. The Applicant and Staff have met multiple times with neighborhood community members (separately and jointly) to discuss and consider their questions and concerns regarding the proposed development. At the community's request, Staff attended a West Fernwood Civic Association Meeting on December 6, 2016, to assist community representatives in presenting the proposed plan to the attendees and answering their questions. Also at the community's request at a meeting with the Planning Director on January 6, 2017, Staff agreed to coordinate and host biweekly meetings, beginning January 24, 2017, with the community representatives to discuss the community's concerns and questions, update the community members of any changes or updates to the proposed development or to the review schedule, in order to ensure that the community members could provide input to Staff and monitor the plan review.

Since then, Staff has been in regular contact with various representatives from the West Fernwood Civic Association (WFCA), Bradley Boulevard Civic Association (BBCA), Wyngate Citizens Association (WCA), and the attorney representing the BBCA (collectively referred to as the "Community"). Staff has received multiple forms of correspondence on this matter and has summarized the concerns of the various community members and groups below. All relevant documents (Attachment 4) and emails (Attachment

18) received at the time this report was written are attached to this report. The Community is opposed to the Applicant's proposed development for the following reasons:

Density

Community Concerns

The Community asserts that the density in this development cannot be supported with the surrounding infrastructure. The placement of over 300 residences on 75 acres exceeds the density in the existing community that already experiences traffic problems and school overcrowding associated with the existing density.

The Community feels this area is dissimilar to Westbard, White Flint, and Rock Spring, all of which have surrounding roads with more robust access/egress. Fernwood and Greentree Roads cannot support this type of growth and are already close to their capacity. MCDOT has known Fernwood to be a congested bottleneck for more than 15 years.

The Community estimates the density of the existing neighborhood to be about 322 units/108 acres or 2.98 dwellings/acre, while the WMAL Preliminary Plan is proposed to be 309 units/70.53 acres or 4.38 dwellings/acre. The result is a much higher density than the surrounding neighborhood, which also contradicts the message conveyed by Toll Brothers to the community that, "The new neighborhood would look similar in density to the existing homes" in the WFCA area. The community strongly disagrees and believes the difference in density will negatively impact the process of integrating the new community with the existing ones.

The Community requests that Toll Brothers design and build a less dense community, one that they feel meets the intent of the law with respect to COS. The Community feels they are reasonable in their expectations, and believe that no change to the proposed density and open space would be irresponsible and in conflict with the intent of the zoning regulations.

Staff Response

Per the Montgomery County Zoning Ordinance, the maximum density permitted by the R-90 Zone Optional Method Development is 4.39 units per acre. The Property is 74.83 acres in size, which would yield a maximum of 328 units (74.83 acres * 4.39 units/acre). However, the Applicant has agreed to dedicate 4.3-acres of the Property to MCPS, thus reducing the size of the Property for the purposes of calculating density to 70.53 acres, which yields a maximum of 309 units (70.53 acres * 4.39 units/acre). Staff finds that the proposed density is consistent with the requirements of the Montgomery County Zoning Ordinance. The final number of units will be determined at Site Plan.

Common Open Space (COS)

Community Concerns

The Community asserts that the proposed COS does not meet the requirements of Section 59.6.3.5, specifically the minimum amount of COS required or the design criteria.

The Community states that, based on Section 59.6.3.5 of the Montgomery County Code, COS is required for any:

- Optional method development in an RNC or Residential zone. Furthermore, COS means an outdoor area that is intended for recreational use by residents and their visitors. COS does not include private individual lots;
- COS must be located in a central position or central positions in the neighborhood bordered by

streets or building lots. It may be public or private. Common open space may also be placed in a location taking advantage of an important adjacent natural feature or open space;

- The minimum width for any required common open space is 50 feet unless the deciding body grants an exception for items such as a trail easement, a mid-block crossing, or a linear park, by finding that its purpose meets the intent of Division 6.3.; and
- A minimum of 50% of the required common open space must be in one contiguous area or only separated by a residential street. Any other areas must be a minimum of 2,000 square feet each and connected by sidewalks, paths, or trails.

The Community feels they have been provided numerous and conflicting interpretations of the amount of open and/or greenspace required in the new development. Thus, in addition to the above criteria, the Community believes the following criteria should also apply to COS:

- In addition to retaining the current forests, an additional 15% of the Property must be designated as COS, where Common Open Space is defined by the County Zoning Code (Section 59.6.3.5.A.2.); and
- The Preliminary Plan appears to include bio-swales, easements, and areas that are too small as contributions to the COS requirement. Bio-swales technically contribute to open space but these types of small strips of land should not be equated with COS as presently permitted by the Zoning Ordinance. These rules seemingly contradict the purpose of COS.

The Community also cites a letter from the Montgomery Country Parks (Attachment 5) that requests more/larger:

- Open field areas for practicing or playing sports;
- Play areas for 2-12 year-olds;
- Dog parks;
- Picnic and seating areas; and
- Basketball courts.

While the Community applauds the proposed forest conservation and dedication for a potential school site, the Community feels this has had minimal impact on the proposed density of the remaining development. Therefore, the Community believes the proposed development does not meet the minimum requirements for COS, and that the Planning Board must not rely on the dedication of land for a potential school site to meet these criteria. Furthermore, the Community believes the 4.3-acre school site should not serve as a reason to support the proposed density and cannot contribute to any open space calculation. The Community requests that the housing density should be reduced to be consistent or lower than the existing community and that more usable open space must be provided.

Staff Response

Per Section 59.4.4.8.C. of the Montgomery County Zoning Ordinance, 15% of COS is required since the Applicant is using the Optional Method of development in the R-90 Zone. While the COS exhibit provided with the Preliminary Plan indicates that 11.2 acres are required, this calculation was based on the 74.83 acres instead of 70.53 acres after the 4.3-acre school site dedication. Thus, 10.58 acres of COS are required for the 70.53-acre project to meet the minimum 15% COS requirement. The Applicant is proposing to provide a total of 18.3 acres, or 25.9% as COS. The final amount of COS, including the design criteria per Section 59.6.3.5.B., will be evaluated in detail at the time of Site Plan review.

Staff shares the community's concern regarding the recreational opportunities of the proposed COS as shown. While the Zoning Ordinance allows SWM facilities in COS areas, the purpose of COS areas is to provide recreational opportunities for residents and visitors. SWM facilities shouldn't be allowed to count as COS to the extent that they render the COS unusable for recreation. The Applicant has worked with Staff to reduce the size of the SWM facilities and improve the potential for recreational use in some of the COS areas, and Staff would like to see more of this done at the time of Site Plan review.

Traffic Impact

Community Concerns

The Community is highly concerned with many aspects of the traffic and transportation related impacts associated with the proposed Preliminary Plan. Please see Attachments 6 and 4 for the full written correspondence on traffic related concerns. In summary, the Community has the following primary concerns related to traffic and transportation:

- A more rigorous review of the traffic study is warranted;
 - The Community does not believe the Applicant's traffic study is accurate, and based on what discrepancies they have identified in the submitted study (as described below), believes the Board should find that the proposed development cannot be supported by the existing infrastructure – and that the Applicant should be directed to mitigate site-generated traffic in accordance with the Subdivision Staging Policy:
 - Potentially Anomalous Existing CLV Datapoint: While the term “anomalous” is subjective, the Applicant's “existing” CLVs observed for Fernwood & Democracy is the lowest CLV in the Planning Department's entire historical online database for this intersection. In fact, the only observed PM CLV that results in an LATR “PASS” out of all these observations is the Applicant's. This includes the observation measured just four weeks prior, which was sponsored by the Planning Department.
 - Inconsistent Trip Distribution used for NIH Expansion Pipeline Project: According to the Suburban Hospital Expansion LATR, over 4% of the future NIH Expansion PM peak-hour outbound vehicle trips will use northbound Greentree Road. However, the Applicant's LATR only allocates 2% of future NIH Expansion trips to this route. This missing 2% is enough to result in a LATR failure for the Applicant at Fernwood & Democracy. Additionally, the Applicant's LATR does not allocate any PM outbound vehicle trips westbound on Democracy Boulevard for this pipeline project, which is inconsistent with the LATR Guidelines.
 - No Consideration of Large Vacancies in Rock Spring Office Buildings: Large vacancies in Rock Spring, often referenced by the Planning Department and Board, can result in inaccurate forecasts of potential future conditions. Large vacancies can be filled at any time (without regulatory review), increasing “existing” CLV counts beyond the values that are being measured. It is inconsistent that the Planning Department demands applicants to incorporate the impact of pipeline developments (i.e., buildings that are approved but unbuilt), but doesn't demand any consideration for buildings that are approved, built, but happen to be vacant.
 - LATR CLV values are calculated for the peak-volume hour, not the peak-CLV hour: this issue is a flaw of the LATR Guidelines and not of the Applicant – but it should be considered. The Guidelines state that the CLV values should be calculated during the AM and PM “peak” hours, and defines this as the hour where the “highest sum of the existing traffic [is] entering all approaches to

each intersection” (i.e., the hour that has the most overall volume, or peak-volume hour). Unfortunately, this doesn’t necessarily coincide with the hour yielding the highest CLV, the peak-CLV hour. The peak-CLV hour for Democracy and Fernwood yields a CLV that is 16 points higher than the peak-volume hour, which is nearly half of the 38-point test margin.

- A Delay-Based Adequacy Test is Justified: Based on testimony by Chair Anderson during 2016-2020 SSP hearings, the Planning Department Staff have the discretion to be able to demand a delay-based (e.g., Highway Capacity Manual, or HCM methodology) for any studied intersection, even if the CLV is adequate (i.e., under the 1,600 SSP threshold that triggers HCM analysis). The rationale for the 1,600 threshold is that it is well-understood that CLV values are not dependable for volume-to-capacities approaching 1.0. By comparing historical CLV and time travel index (TTI) data from the Planning Department, one can easily determine that Fernwood & Democracy is operating at a volume-to-capacity level near or greater than 1.0, and thus a delay-based analysis is warranted. The Community requests that a delay-based adequacy test be conducted prior to approval of the Applicant’s Preliminary Plan, and that the Applicant be required to mitigate appropriately, pending the results.
- Even though the study concludes that intersections will continue to operate within the acceptable congestion standard thresholds, a more rigorous operational analysis of the intersection of Fernwood and Democracy is needed;
- A review of Fernwood Road and Democracy Boulevard intersection, possibly providing angled lanes, improved signage that is much more visible, and other changes to make this intersection more pedestrian friendly, is requested;
- An operational analysis of Fernwood Road between Democracy Boulevard and Bradley Boulevard should be performed;
- An analysis should be performed to forecast the future congestion of Fernwood Road, based on existing, pipeline, and proposed WMAL traffic;
- Greyswood Road/Greentree Road:
 - Traffic study to confirm the speed of traffic and identify remedies has been conducted;
 - The study recommends bump outs and/or a median at two intersections;
 - Additional and more prominent signs should be posted (speed limits, children playing, other suggestions);
 - Streets should be striped properly (centerlines, travel lanes, parking, and crosswalks);
- Renita Lane:
 - Opposed to an extension/connection of Renita Lane to the proposed development;
 - If connected, consider making Renita Lane a private road for emergency use only and consider other traffic calming measures in the event that it cannot be restricted; and
 - Add traffic islands plus speed bumps on the WMAL side of Renita Lane as visual and physical traffic inhibiting measures.

Staff Response

The Community’s concerns regarding the Applicant’s Traffic Study are addressed in detail in the Transportation section of this report, but Staff does not agree that a more rigorous review of the traffic study is warranted, and does not believe that a delay-based adequacy test is necessary. Staff believes the Applicant has sufficiently and accurately followed the requirements of the 2012-2016 Subdivision Staging Policy and associated LATR Guidelines.

The remaining requests for operational analyses, studies, and physical improvements to the roads (outside of what is required by the Preliminary Plan and/or Site Plan approvals) are most appropriate to be handled through coordination with MCDOT and Planning Staff. MCDOT and Planning Staff have continued to express a willingness to help address these concerns through ongoing efforts with the Community.

The Applicant has agreed to submit a streetscaping plan for Greyswood and Greentree Roads, with final details and timing of improvements to be determined at Site Plan. As outlined in detail in the Transportation section of this report, the public road extension of Renita Lane is required both from a safety standpoint and from an improved pedestrian and vehicular circulation standpoint. The Applicant has proposed bump-outs at every intersection on Renita Lane to reduce the length of pedestrian crossings and to narrow the travel lanes to 10 feet in each direction, which will both serve as traffic calming measures.

Integration with Surrounding Community

Community Concerns

The Community states that, for the past 30 years, they have been requesting that SHA install a noise barrier along I-270, and while the Applicant is only required to mitigate noise for any new units, the Community is requesting that the Applicant install a noise abatement solution that benefits both the new units and the existing community. The Community urges alternative and creative ideas to address the issue, and recognizes this will likely take more time/effort to work with SHA to identify construction methods/materials and/or identify funding for a potential noise solution. The Community asserts that this is the “right” approach to grow and integrate environments with surrounding communities.

The Community has made multiple requests to the Applicant and the County regarding streetscape improvements to Greyswood Road and Greentree Road not only for safety but also to help integrate the new development into the existing community. In short, the Community is requesting that the Applicant be required to improve and/or replace trees, lighting, walkways, powerlines, signs, and stormwater facilities at the intersection of Greyswood Road and Fernwood Road to create a more appealing entrance to the Community. The Community states that this would be an excellent way for both the County and the Applicant to demonstrate how to integrate communities.

The Community requests that the Applicant expand the plan to include Greentree Road and Greyswood Road for streetscaping improvements to include walkways, bike lanes, street lining, bump outs, stamped concrete corners, trees, lighting, power lines, street signs, development entry signs, and stormwater improvements.

Lastly, to better integrate the proposed development into the existing neighborhood, the Community recommends that existing residents should be allowed to use the proposed pool and community center (through membership or other ways), as there is no community pool/center within safe walking distance of the existing neighborhood. The Community feels that this would help create a better sense of an integrated community and provide amenities to the existing homeowners.

Staff Response

Staff coordinated with SHA and the Applicant over the past several months to try to find a potential noise solution for the area closest to I-270 that would benefit both the existing residents and the new development. Due to the topography and hydrology of this area, a noise solution is highly problematic.

While the Applicant is required to mitigate noise for any new residential units, the Applicant is not required to mitigate noise for existing units. However, the Applicant has agreed to continue to cooperate with SHA and Staff regarding our efforts to try to find a potential/feasible noise solution that benefits the existing and new residential units.

The Applicant has provided a streetscape plan for Greyswood and Greentree Roads. Final details and improvements required by the streetscape plan will be determined at Site Plan.

The Applicant has declined offering membership to the pool and clubhouse to the existing community at this time. The Applicant prefers to turn the pool and clubhouse over to the HOA and let them decide how to run the pool and clubhouse.

School Overcrowding

Community Concerns

The Community states that Ashburton is one of the most overcrowded elementary schools in the County, and North Bethesda Middle School and Walter Johnson High School do not fall far behind. While the School Board wrestles with these capacity issues, no definitive and acceptable decision has been reached.

The new development is in the Ashburton ES/North Bethesda MS/Walter Johnson HS boundary. The Community asserts that Ashburton ES is currently at 145% capacity. With over 952 students, it is the third largest elementary school in the County and exceeds the upper limit of MCPS's own preferred range of enrollment for the elementary school level (750 student maximum). Both the middle and high schools are large and projected to grow. North Bethesda MS is currently at 1,183 students. By 2022, it will likely be larger than many high schools in the region.

WJ High School currently has 2,335 students and is anticipated to reach almost 3,000 students by 2020-2021 based on current projections. If that happens, it will be one of the largest high schools in the County.

The school capacity issues in the WJ cluster resulted in a Cluster Roundtable Discussion led by MCPS to address the issue of overcrowding. A full report of their findings was sent to the Superintendent and the Board of Education in November 2016. On November 21, 2016, the School Board voted to approve the following measures:

- Elementary Schools:
 - MCPS staff to do a deeper study of growth in the area, identify the potential sites for a 7th elementary school in the WJ Cluster, and begin a site selection process following the completion of that study.
- Middle Schools:
 - North Bethesda MS capacity will be increased to 1,200 (shovel hits the ground in January 2017).
 - New Tilden will also be built to hold 1,200 (opening in the fall of 2020).
 - MCPS staff to get back to the Board of Education about a site for a 3rd middle school.
- High School:
 - Woodward High School will be reopened to solve WJ's overcrowding.

The Community believes that although this represents significant progress, given all the new developments in the area, the cluster will still have insufficient capacity. The Community believes that

school capacity in the area is inadequate, and that no further development should occur without plans for an additional middle school and two more elementary schools.

Staff Response

School capacity is absolutely a concern in this area. However, Staff believes that the MCPS and the Board of Education are taking steps to address the concerns of capacity in this area. Also, the Applicant has agreed to dedicate 4.3 acres of the Property to MCPS to be used as an elementary school. Furthermore, the Property is being evaluated under the 2012-2016 SSP, and must satisfy the requirements of the school test (more detail in the APF/School Section below).

Environmental Impacts

Community Concerns

The Community is highly concerned with many aspects of the environmental impacts associated with the proposed Preliminary Plan. Please see Attachment 4 for the full written correspondence on environmental related concerns. In summary, the Community has the following primary concerns related to potential environmental impacts:

- The requested Forest Conservation Waiver should be rejected;
- The requested Tree Variance to remove approximately 50% of specimen trees should be rejected;
- Contiguous COS requirement (50% of total COS required) be centrally located onsite with no reduction in forest conservation;
- Support for the proper location of a perimeter trail, to be located on the inside edges and not running through existing forest;
- Construction of a noise wall adjacent to I-270;
- Expansion of the Preliminary Plan to include streetscaping on Greentree/Greyswood;
- Support of enhancements to park facilities; and
- Request to see reports of a soil test conducted onsite – suspect contaminants onsite.

Staff Response

As outlined in detail in the Environmental section of this report, Staff recommends approval of the Forest Conservation Waiver request and the Tree Variance request. A more detailed review and analysis of COS areas, trail location, proposed noise mitigation, and streetscape plan will be conducted at the time of Site Plan review.

As covered in more detail in the Parks section of this report, Staff recognizes that there are park amenity needs in the area, but given the more critical need for a school and the ability to address that need through the development review process via the newly enacted dedication in exchange for school impact tax credit mechanism, it is far more advantageous for the County to avail itself of this opportunity and acquire a school site in this subdivision. The proposed Preliminary Plan, with the school dedication, meets all the regulatory requirements and findings necessary for approval, and therefore Staff is not recommending acquisition of additional land for parks as a condition of approval. In discussions with Park and Planning Staff, MCPS has expressed a willingness to coordinate with the Parks Department and the Community to allow for recreational opportunities on the 4.3-acre school site until MCPS develops the site as a school.

Accessibility

Community Concerns

The Community requests that:

- A bike trail/sidewalk along Fernwood Road should be installed to provide a continuous connection from Democracy to NIH, and that Greentree Road be evaluated for bike lanes;
- Pedestrian and bicycle access to be addressed to and from the proposed development and schools, NIH, Montgomery Mall, and the Transit Center;
- Proposed development should include a plan for mandatory unit/owner fees to support bus/shuttle service to Westfield Mall and/or Metro;
- County to review Ride-On routes and determine additional routes/stops that can better service the existing and new community; and
- A new budget item be placed on the MCDOT agenda for either an overhead bicycle/pedestrian bridge over Democracy Boulevard or an underground tunnel, and that the Applicant be required to pay for part of this improvement as it will benefit the new community.

Staff Response

The Planning Board does not have any legal authority to require mandatory unit/owner fees to support bus/shuttle service to Westfield Mall and/or Metro. The remaining requests are more master plan or County in nature, not typically required of an individual property owner. Staff will continue to work with the Community to pursue these projects within the area.

SECTION 2: PRELIMINARY PLAN

MASTER PLAN CONFORMANCE

The Approved and Adopted 1992 *North Bethesda/Garrett Park Master Plan* (Master Plan) identifies the Property as a Key Vacant or Redevelopable Parcel – No. 20 (page 73). Applicable sections are included in Attachment 7. The Master Plan notes that the Property, *“is occupied by four transmission towers, and the owners have indicated that they plan to continue the present use of the property for the foreseeable future. The possibility of joint use of the property, including a community recreation center and ballfields, was investigated. However, the owners indicated that the existence of a multiplicity of underground cables and equipment, at a shallow depth, rendered construction, or even ballfields, impracticable. This property, the largest in North Bethesda, is surrounded on three sides by single-family housing in the R-90 Zone. Should the use of the property for transmission towers ever be discontinued, this Plan recommends that the site be used for single-family residential development in the R-90 Zone. The Plan also recommends that Greentree Road be connected to Greyswood Road as part of any residential development”* (page 84).

The Master Plan confirmed the existing R-90 Zone for the Property, and recommended the connection of Greyswood and Greentree Roads and that the site be used for single-family development in the R-90 Zone. As proposed, this development will achieve several of the Master Plan’s general land use and environment objectives, including the following:

- Encourage a land use pattern that provides opportunities for housing and employment.
- Preserve and increase the variety of housing stock, including affordable housing.

- Preserve and expand green areas and greenways, including institutional open space, for environmental protection, wildlife sanctuary, recreation and visual relief.
- Preserve existing woodland and encourage reforestation throughout the Planning Area (pages 33-34).

The proposal includes new residential development consistent with the Master Plan recommendations. The residential component will provide additional housing opportunities and increase the variety of housing stock including 12.5 percent (plus one additional) MDPU. Approximately 18.3 acres of the site will be preserved as COS areas, of which approximately 11.08 acres will be preserved and protected by Category I Conservation Easements. The majority of the Category I Easement areas are located along the north and southern ends of the Property, linked by a series of linear park-like COS connections. As proposed, these Category I Easement and COS areas help preserve existing woodland, and aide environmental protection, recreation, and visual relief.

Street Network

The proposed Preliminary Plan shows the 70-foot right-of-way dedication and improvements for Greentree Road (P-2) and Greyswood Road (P-3) classified in the Master Plan as primary residential streets with a minimum right-of-way of 70 feet with two travel lanes (page 164). The Applicant is required to dedicate and construct the full right-of-way for this connection as shown on the Preliminary Plan. Renita Lane is not classified in the Master Plan, but the Applicant is required to improve Renita Lane as a modified secondary residential street, with variable pavement widths, including two travel lanes (one in each direction) and parallel parking on the north side. While Renita Lane is not specifically identified by the Master Plan, its extension to Greentree Road will provide the logical extension of the public street network, while providing more efficient pedestrian and vehicular connections. It will also provide a third remote point of access as required by Fire and Rescue. MCDOT and Planning Staff recommend a modified, reduced-width right-of-way in order to minimize impacts to the existing forest on the southern end of the Property.

Urban Design

The Master Plan does not provide specific urban design guidance for the Property. However, two of the seven urban design objectives in the Master Plan are applicable to the proposed development:

- Add local streets to create a more interconnected local street network and reduce the size of blocks in high intensity areas.
- Greatly improve the pedestrian friendliness of new and existing streets, particularly within walking distance of transit nodes, and increase the number of pedestrian and bicycle routes to transit (page 109).

The Applicant is proposing the logical extension of public streets, and an internal network of private streets, which form a grid pattern and create a more interconnected local street network. The Applicant has agreed to coordinate with Staff, MCDOT, MCDPS-ROW Permitting, and the Community to provide improvements to Greentree and Greyswood Roads, which are both public roads, to improve the pedestrian friendliness of the existing streets and to blend the existing and new developments together.

Pedestrian Network

The Master Plan made no specific pedestrian recommendations for the Property. However, the proposed pedestrian network of sidewalks and paths will link different sides of the development to the existing sidewalks on Greentree and Greyswood Road. The community currently uses the Property as a

park and recreation area. There is a worn path on the outer ring of the Property created by walkers and joggers, and the Applicant proposes to preserve the functionality of the path by providing a similarly located loop of path and sidewalks through the development and COS areas.

Bikeway Network

The Master Plan identifies Greentree/Greyswood Road as a Class III signed, shared roadway/bikeway (page 168). As a Class III shared roadway/bikeway, cyclists are expected to share the road with motor vehicles. Therefore, only the standard right-of-way improvements as shown on the preliminary plan are expected at this time.

Environment

The Master Plan's main environmental objective is to "protect and enhance the environmental resources of North Bethesda-Garrett Park" (page 247). The Plan also makes general recommendations for tree preservation and noise including the following:

- Protect woodlands, green space, steep slopes and wetlands through land use recommendations and development regulations.
- Retain mature trees as buffers in new residential development to create visual separation from major roads.
- Retain the maximum number of specimen trees on site where they occur.
- Provide additional trees along existing streets, in median strips, and in parking lots whenever feasible.
- Require every new road recommended by this Plan have a streetscape plan with an emphasis on tree planting.
- Provide noise attenuation wall when the I-270 spurs are widened at locations where existing residences will be subjected to high noise levels (pages 247-248).

The proposed development will implement the applicable environmental recommendations of the Master Plan. Through the Category I Conservation Easement and COS areas, approximately 10.75 acres of the Property will be retained as forest. As outlined in the Environmental section of this report, the Applicant has attempted to minimize impacts to specimen trees and forest, and will plant mitigation trees for the specimen trees that will be removed. The Applicant has agreed to provide a streetscape plan for Greentree and Greyswood Roads per the Master Plan recommendation, with an emphasis on tree planting and traffic calming. The Applicant is also proposing to add several street trees and landscaping along Renita Lane and the internal network of private streets. The final details of the streetscape plan and of the landscaping and lighting plan will be determined at Site Plan.

Noise

The Master Plan states that noise from the Capital Beltway (I-495) and I-270 is intrusive because of large traffic volumes on both roadways. The Plan states that "any undeveloped or redevelopable land adjacent to major highways should use noise-compatible land use and site design and other mitigation measures recommended in the Staff Guidelines for the Consideration of Transportation Noise Impacts in Land Use Planning and Development" (page 252).

The Applicant has submitted a noise study with this application, and is proposing to construct a noise wall along I-495. The Applicant will also be required to mitigate the noise generated by the I-270 ramp for the rear outdoor space of the fourteen units located on the north side of Greentree and Greyswood Roads. The Applicant has also agreed to continue to work with the community and SHA to potentially

deliver a noise mitigation solution that benefits both the existing community and proposed residential units. Final details of the noise mitigation features/structures will be determined at Site Plan. Further details of the noise analysis and required mitigation are discussed in the Environmental section of this report.

Conclusion

The proposed development provides significant vehicular, pedestrian, bicycle, school, and recreation improvements, all consistent with the goals and objectives of the Master Plan. Therefore, based on the analysis above and the conditions in this report, Staff finds the proposed development to be in substantial conformance with the 1992 Approved and Adopted *North Bethesda/Garrett Park Master Plan*.

PUBLIC FACILITIES

Required Vehicular Site Access Points

Fire and Rescue requires three remote points of access to serve the number of units proposed on the Property, given its size and location within the existing community. Therefore, the proposed development includes three access points from Greentree Road, Greyswood Road, and Renita Lane. Greyswood Road will be connected to Greentree Road through the Property, while Renita Lane will be extended through the Property to intersect with Greentree Road. This extension of Renita Lane is required to provide the logical extension of the public street network in the immediate vicinity, while providing more pedestrian and transportation connections, and providing the third remote point of access.

Master-Planned Roadways, Bikeways, and Public Roads

In accordance with the 1992 *North Bethesda/Garrett Park Master Plan*, Greentree Road (P-2) and Greyswood Road (P-3) are designated as two-lane primary residential streets, with a recommended 70-foot right-of-way and a Class III bikeway.

The 2005 *Countywide Functional Bikeways Master Plan* recommends PB-5, Greyswood Road, as a shared roadway. This bikeway can be implemented by the County through a variety of treatments. It is anticipated that bicyclists will share the road with vehicles throughout the proposed development without additional enhancements beyond those that are already proposed.

Renita Lane is not specifically identified in the *North Bethesda/Garrett Park Master Plan*. This secondary residential street is an existing street, which is proposed to be extended through the southern portion of the Property to Greentree Road with three different cross sections (west, middle and east). The proposal includes 5-foot-wide sidewalks on both sides of the entire length of Renita Lane. Crosswalks are provided at all street intersections.

The Renita Lane cross section and right-of-way widths have been reduced as much as possible between Greentree Road and existing Renita Lane in order to minimize the forest clearing on the south end of the Property. The Applicant will provide a Public Improvement Easement (PIE) along each side of Renita Lane in lieu of additional right-of-way that would typically be required in order to reduce the impacts of the required setbacks. This results in further reducing the amount of forest clearing than would otherwise be required if the full right-of-way width was required.

Renita Lane is proposed as a public 60-foot-wide Primary Residential Street between Greentree Road and Private Street “3”. This section of Renita Lane is proposed as a twenty-nine foot and four inches (29’ 4”) right-of-way between Private Street “3” and Private Street “1”, with an environmentally preferable 28-foot wide pavement section. The Montgomery County Department of Transportation has recommended that this section be reduced to a twenty (20) foot paved section because it will not contain any parallel vehicle parking spaces. Final right-of-way and pavement widths will be determined at the time of Site Plan.

The middle section of Renita Lane between Private Street “3” and Private Street “1” is proposed as a twenty-nine foot and four inches (29’ 4”) right-of-way, with an environmentally preferable 28-foot wide pavement section.

Finally, the eastern section of Renita Lane between Private Street “1” and the existing Renita Lane is proposed as a twenty-seven foot and four inches (27’ 4”) right-of-way, with an environmentally preferable 26-foot-wide pavement section as it transitions to the existing section of Renita Lane.

Bicycle Parking

The Zoning Ordinance requires a minimum of one bicycle parking space for every 5,000 square feet of Swimming Pool (Community), with up to a maximum of 25 bicycle parking spaces, while fifteen (15) percent of the required bicycle parking spaces must be long-term spaces. The Applicant should provide inverted U-shaped bike racks at the proposed community building/swimming pool area. The final amount and location of bicycle parking will be determined at Site Plan.

Pedestrian Safety at Street Intersections

The paving section of all streets is proposed to be reduced to 20 feet wide at intersection locations through the provision of curb extensions to provide traffic calming and shorten pedestrian crossings.

Public Transit Service

The nearest bus route is the Ride On 47 along Fernwood Road, approximately ½ mile from the Property. Bus stops for this Ride-On route are located near the intersection of Greyswood Road and Fernwood Road. Other bus stops for this route along Fernwood Road that will be close to the proposed subdivision are at Inglemere Drive, Stoneham Road, Brixton Lane, and Tusculum Road.

Local Area Transportation Review (LATR)

A traffic study was required to satisfy the LATR test because the proposed development generates more than 29 total peak-hour trips within the weekday morning and evening peak periods. The traffic study estimated existing traffic conditions, background forecasts (existing plus the approved but unbuilt pipeline of development), and the estimated trips generated by the proposed development, for impacted intersections in the study area.

In addition to pipeline trip generation estimates from several developments, the Applicant’s traffic study relied on the following documents to estimate the total pipeline trip generation from the National Institutes of Health (NIH) Bethesda campus:

1. 1992 MOU between M-NCPPC and NIH in conjunction with 2004 NIH Master Plan Update
2. 2011 National Institutes of Health (NIH) Employee Transportation Survey
3. 2012 LATR/PAMR for Suburban Hospital Expansion
4. 2013 Comprehensive Master Plan NIH Bethesda Campus, June 14, 2013
5. 2014 NIH Traffic Monitoring and Parking Utilization Studies

Pipeline Development Trip Generation and Trip Assignments

Existing traffic counts represent the traffic conditions as they are today. Background traffic forecasts represent future conditions with existing peak hour traffic counts plus the estimate of traffic trips generated by the development pipeline, but without the development of the subject property. Pipeline traffic is the traffic projected to be generated by the approved but not fully built-out development projects in the study area, which would impact the same intersections being analyzed for the proposed project assumed over the next five years.

Existing and Background Conditions

For existing conditions, all intersections in the study area currently operate within the North Bethesda and Bethesda-Chevy Chase Policy Area's Critical Lane Volume (CLV) standard of maximum 1,550 CLV and 1,600 CLV respectfully. Under the existing traffic condition, the highest existing peak hour CLV is 1,325, which occurred at the Fernwood Road/Bradley Boulevard intersection during the PM peak hour. The second highest existing peak hour CLV is 1,222, which occurred at the Fernwood Road/Democracy Boulevard intersection during the PM peak hour.

With the addition of the pipeline traffic forecasts to the existing conditions (the background forecasts), these intersections will continue to be within the maximum acceptable CLV standards of 1,550 CLV and 1,600 CLV. The estimate of background forecast indicates that the highest peak hour CLV of 1,444 will occur at the Fernwood Road/Democracy Boulevard intersection during the PM peak hour, well within the acceptable congestion standard of 1,550 for this intersection.

Total Future Condition

The total peak hour traffic forecast is the combined background conditions plus the number of trips estimated to be generated by the proposed development of the Property. Based on ITE and M-NCPPC trip generation rates, the development of 170 single-family detached dwelling units and 158 townhomes, as described in the applicants traffic impact study, will generate 209 AM peak hour trips and 271 PM peak hour trips. The traffic study assigned these trips to the roadway network based on LATR trip distribution tables for residential development. The applicant's traffic consultant also coordinated with the Planning Department before submitting the traffic study.

The estimated total future condition indicates that all the study intersections will continue to operate within the acceptable Policy Areas congestion standards of 1,550 and 1,600 CLV during both AM and PM peak hours without requiring any mitigation. The highest CLV of 1,512 occurs at the intersection of Fernwood and Democracy in the PM peak hour.

It should be noted that the current proposal has been revised and lowered to 159 single-family detached dwelling units and 150 townhomes. Thus, both the total number of trips generated from the proposed development and CLV counts will be lower than described above.

Capacity/Critical Lane Volume (CLV) Analysis

The LATR analysis, including the CLV calculations, was conducted in accordance with the 2012-2016 Subdivision Staging Policy and the most recent LATR and TPAR Guidelines. Based on the traffic study results, the capacity/CLV values at the studied intersections are shown in the table below for the following traffic conditions:

1. Existing: The traffic condition as it exists now.
2. Background: The existing condition plus the trips generated from approved but unbuilt nearby developments.

3. Total: The background condition plus the additional site-generated trips based on proposed development.

Table 1: Required CLV Calculations Per LATR Guidelines

Studied Intersections <i>NB (North Bethesda 1,550 CLV)</i> <i>BCC (Bethesda-Chevy Chase 1,600 CLV)</i>	Traffic Condition					
	Existing		Background		Total	
	AM	PM	AM	PM	AM	PM
Fernwood Road/Democracy Boulevard (NB)	993	1,222	1,146	1,444	1,208	1,512
Fernwood Road/Greyswood Road (NB)	927	1,015	999	1,100	1,110	1,165
Fernwood Road/Greentree Road (BCC)	960	969	1,032	1,054	1,090	1,090
Fernwood Road/Bradley Boulevard (BCC)	1,275	1,325	1,275	1,325	1,296	1,358
Rockledge Drive/Democracy Boulevard (NB)	642	633	822	884	847	901
Old Georgetown Road/Lone Oak Road (NB)	1,101	1,035	1,337	1,314	1,342	1,318
Burdette Road/Bradley Boulevard (BCC)	1,132	875	1,132	875	1,143	891
Greentree Road/Longwood Road (BCC)	74	88	74	88	124	167
Fernwood Road/Tusculum Road (NB)	984	985	1,056	1,070	1,090	1,103

As indicated above, the calculated CLV values do not exceed the CLV standard of 1,550 for intersections within the North Bethesda Policy Area and the CLV standard of 1,600 for the Bethesda-Chevy Chase Policy Area. Thus, the LATR test is satisfied. No LATR improvements or mitigation is required.

The community has concerns about the traffic calculations. The community contends that the traffic counts performed by the applicant in November of 2015 are unusually low compared to a count that occurred in October 2015. However, staff reviewed the traffic counts and found them and the applicant's methodology to be acceptable.

One of the community's major concerns has been the estimated traffic generated by the pipeline of approved but unbuilt future development projects in the traffic study area, which, they contend, would create unacceptable traffic congestion on Fernwood Road. They believe that the applicant's traffic study undercounted the projected pipeline traffic from the NIH Bethesda campus (NIH) on Old Georgetown Road. NIH is not located near the WMAL property, but it is anticipated to distribute some traffic along Fernwood Road. When calculating the background trips from NIH, the applicant added in the entire number of trips that NIH was capped at under the 2004 NIH Master Plan. The total capped PM outbound trips is 4,450, which includes the existing 1,548 PM outbound trips calculated in the 2014 NIH Traffic Monitoring and Parking Utilization Studies. This resulted in the Applicant adding 2,902 future trips from NIH into the traffic study, which represents the maximum number of trips that NIH is currently allowed, regardless of the number of employees. In fact, in NIH's most recent Master Plan, the 2013 Comprehensive Master Plan, it stated that there were 20,594 employees on the NIH Bethesda campus in 2013. It estimated that in the next 20 years, the maximum development alternative for the NIH campus would have an additional 10,000 employees with a total of 3,903 PM outbound trips. The maximum development alternative generates less PM outbound trips than the total 4,450 PM outbound trips that the applicant included in the background trips. Because of this, Staff found that the applicant's number was quite conservative.

The community also believes that since the NIH's 2011 Employee Transportation Survey, Google and other latest traffic Apps direct more traffic exiting from NIH onto Old Georgetown Road to take Fernwood Road to Democracy Boulevard and then make a left turn to access the I-270 ramp instead of

going north on Georgetown Road and making a left on Democracy Boulevard, because during the PM peak hour Old Georgetown Road going north is more congested and slower than the Greentree Road alternative and therefore is offered as a faster route. The community contends that this additional diverted traffic at Fernwood Road and Democracy Boulevard is not captured in the 2% estimate of NIH traffic traveling north on Fernwood Road, and therefore creates an undercount in the background trips at this intersection. Staff agrees that cut-through traffic exists. However, the existing cut-through traffic is captured in the existing traffic count.

The 2011 NIH Employee Transportation Survey indicated that 4.3 % of NIH employees live in the 20817 Zip Code area, which includes the Subject Property. These employees are therefore assumed to be leaving NIH from the Greentree Road exit and going to destinations in the 20817 Zip Code area. The Applicant's traffic study assumes that, based on this Survey, out of the future 2,902 trips projected to exit from NIH onto Greentree Road in the PM peak hour, 2%, or 58 trips, would travel along Fernwood Road toward the Fernwood Road/Democracy Boulevard intersection. For LATR purposes, the applicant has used this 2% estimate and applied it to the trip generation estimates for the NIH campus to evaluate the congestion level at the Fernwood/Democracy intersection.

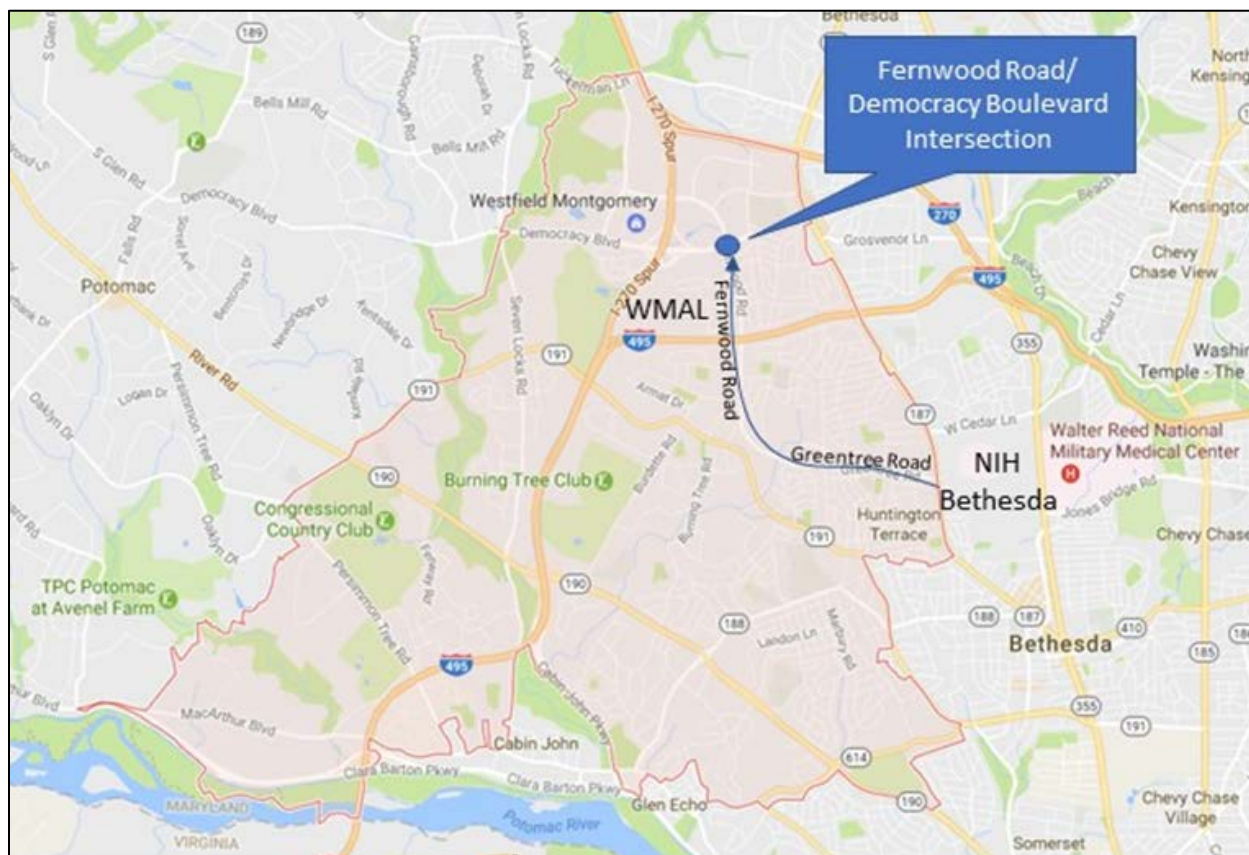


Figure 4: 20817 Zip Code

Staff believes that the 2% estimate is acceptable because the applicant is applying this 2% estimate of traffic diverted directly to the Fernwood Road/Democracy Boulevard intersection to a long-term, maximum development of the NIH campus, whereas under the current LATR regulations the pipeline trips from any nearby developments are to be counted only for the next 6 years. It is safe to assume that during the next 6 years the full buildout of NIH resulting in 4,450 total PM outbound trips will not occur,

and therefore any undercount that could possibly be hidden in the applicant's traffic study's estimate of cars travelling on Fernwood Road towards its intersection with Democracy Boulevard should be covered by this higher buildout assumed for the future increase of employees at NIH. In addition, Staff believes the applicant's 2% estimate is conservative because the existing 4.3% of NIH traffic goes into the entire 20817 zip code. There is not much room left for large development in the zip code that would generate traffic on Fernwood and the 2% would come from new development, which is limited. The applicant also put that entire 2% into the critical movement to ensure those trips would be fully counted when calculating the future development.

Another reason staff believes that the traffic study is reflecting an accurate count of the background traffic is that, over the years, despite the increase in the number of NIH employees, a rigorous Transportation Management Program (TMP) implemented by NIH has resulted in reduced trips from the NIH campus. The traffic management program consists of a Carpool/Vanpool Program; Telecommuting including Maxiflex Schedule and a Compressed Work Schedule; Bicycle Subsidy Program; Cycling Amenities; and Transhare. These TMP measures have reduced the campus auto trip generation, increased the share of alternate modes of transportation to and from the campus, and lowered the employee parking supply ratio. Table 2 below describes each program in full detail, while Figure 5 below shows the downward trend in the historical vehicular trip generation rates for the NIH Bethesda campus.

Table 2: NIH Transportation Management Plan (TMP) Measures
(Source: 2013 Comprehensive Master Plan NIH Bethesda Campus)

Program	Description
Carpool/Vanpool Program	NIH previously reserved 463 parking spaces for carpools and vanpools. In the past, there were 269 registered carpools (involving 269 employees) and 14 registered vanpools (involving 122 employees). NIH employees interested in a carpool or vanpool are directed to the web link for Commuter Connections. This is a network coordinated by the Metropolitan Washington Council of Governments (COG). It provides a regional database of commuters and gives NIH employees an opportunity to find a match for their commute not only from within NIH but also from other institutes and offices in the Bethesda-Chevy Chase area.
Telecommuting	NIH is encouraging employees to work at home on a part-time basis, using their computers and telephones.
Flexible Work Schedule	NIH has given its employees the option to use the following schedule arrangements: <div> <p>Maxiflex Schedule This flexible work schedule consists of core hours on fewer than 10 workdays in the biweekly pay period and in which a fulltime employee has a basic work requirement of 80 hours for the biweekly pay period.</p> <p>Compressed Work Schedule Employees can fulfill an 80-hour biweekly work requirement in less than 10 workdays with this program. An employee may vary the number of hours performed on a given workday or the number of hours each week within the limits established by the NIH.</p> </div>

Bicycle Subsidy Program	This program provides a \$20 monthly subsidy to employees who commute to work via a bicycle; however, they are restricted from receiving parking benefits or Transhare in conjunction with the bicycle subsidy.
Cycling Amenities	The Division of Property Management at NIH has a Facilities Support Program for Cycling where the NIH is promoting bicycling to the NIH campus by improving facilities to have amenities for lockers, showers, and bike racks. Current components of the program that are underway or have been completed are location surveys for showers, lockers, and bike racks, condition surveys, occupancy and user surveys, and rack relocation plans and projects. It is estimated that on any given day there are 350 - 400 cyclists coming to the campus.
Transhare	Transhare reimburses employees up to a certain amount of travel costs dependent upon commuting distance for using public transportation. It has been instrumental in reducing the number of needed parking spaces at the NIH and has continued to grow since October 1, 1992.

Figure 3:
National Institutes of Health
Historical Vehicle-Trip Generation Counts
1992-2014

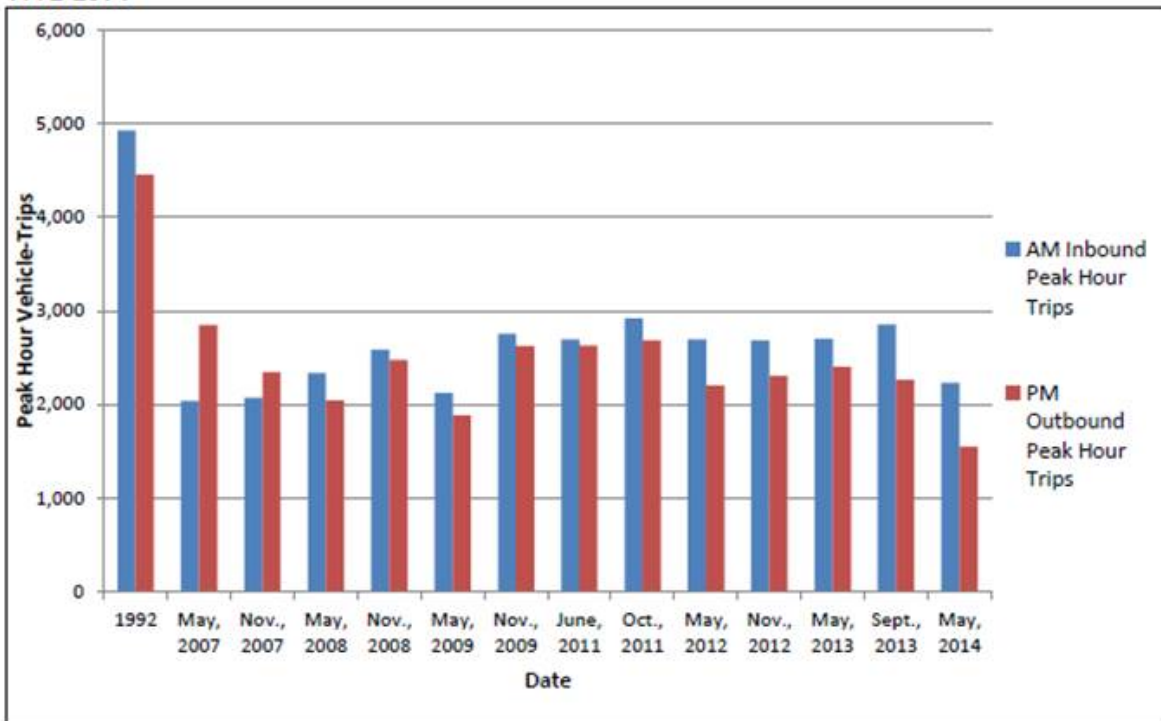


Figure 5: Traffic Monitoring and Parking Utilization Studies NIH Bethesda, Maryland, July 9, 2014, page 9 (Left AM/Right PM)

The community has also suggested that the NIH trip generation and distribution to Greentree Road described in the 2012 LATR/PAMR for Suburban Hospital Expansion is 4.1%, and therefore, instead of 2% this 4.1% should be assumed to calculate the number of NIH trips travelling north on Fernwood Road in the PM peak hour.

Staff believes that this estimate of 4.1% of NIH traffic traveling west and north on Greentree Road, even if considered an accurate reflection of NIH traffic going west on Greentree Road, is not higher than the 2011 NIH survey that the Applicant has relied on, and which indicated that 4.3 % of NIH employees live in the 20817 Zip Code. The Applicant has used 4.3% estimate to be exiting onto Greentree Road and assumed that 2% out of this 4.3% of NIH's future trips will travel north on Fernwood Road towards Democracy Boulevard. Staff believes that this is a reasonable estimate of NIH traffic that travels on Fernwood Road towards Democracy Boulevard intersection, today and in the future, and as stated earlier, is already reflected in the existing traffic counts at this intersection.

Wells and Associates has responded on behalf of the Applicant to many of the issues above in Attachment 8.

Transportation Policy Area Review (TPAR)

The Property is located within the North Bethesda Policy Area for the TPAR test. The roadway capacity in the policy area is adequate but the transit test is inadequate. As of March 1, 2017, a TPAR mitigation payment equal to 25 percent of the General District Transportation Impact Tax (per the 2012-2016 Subdivision Staging Policy) is no longer required. The Applicant must make a Transportation Impact Tax payment based on the higher rates just approved at the time of building permit. Therefore, with the Transportation Impact Tax payment at the time of building permit, the TPAR test is satisfied.

Schools

Proposed School Site

The 1992 *North Bethesda-Garrett Park Master Plan* covered a large geography and focused on the areas around the Metrorail stations at Twinbrook, White Flint, and Grosvenor-Strathmore, as well as the office park at Rock Spring. Some of the communities that were previously part of the 1992 Plan are now the subject of separate, smaller area plans, including the 2009 *Twinbrook Sector Plan*, the 2010 *White Flint Sector Plan*, and the plans currently underway for White Flint 2, Rock Spring, and Grosvenor-Strathmore. During recent master plans, school capacity issues have risen to the forefront of local citizens' concerns as most of these plans are within the boundaries of the Walter Johnson Cluster, which is experiencing overcrowding at all school levels. Due to the nearly coincident schedules for the White Flint 2 Sector Plan and the Rock Spring Master Plan, these two plan updates addressed the school capacity issues in the Walter Johnson cluster area comprehensively. During the outreach phases for these two plans, the Planning Department and MCPS held two joint community meetings to hear concerns and address questions. During the Planning Board's review of these two plans, a joint work session was held on February 16, 2017, at which school capacity issues and possible solutions in the WJ cluster were discussed with MCPS representatives.

In a February 15, 2017 letter to Chairman Casey Anderson, MCPS Superintendent Jack Smith said: *Particularly when faced with constrained land resources, it is incumbent on us to develop new and innovative school construction approaches that work with available parcel sizes and configurations and continue to deliver an appropriate instructional program. As we work with our Planning Department colleagues, we are committed to exploring options to build more urban schools with a reduced footprint that match the more urban settings of much of our new developments. The first critical step in this effort*

is to have dedicated school sites to ensure that space for this vital element of the community is preserved as the development moves forward.

As part of any master plan update process, Planning Department staff work with the MCPS staff to assess the potential number of students that could be generated from future residential development anticipated by a master plan. The Planning Department and MCPS planners also collaborate on the narrative about public schools within the Plan's geographic area, outlining the possible ways that school capacity issues can be resolved. If necessary, planners seek to identify potential future school sites within a master plan's boundaries. However, finding potential school sites within developed areas is increasingly difficult. Recently, Planning and MCPS staff reviewed potential student generation data for the White Flint 2, Rock Spring, and Grosvenor-Strathmore master plans. In addition, potential residential development and student generation numbers were developed for the WMAL site and shared with MCPS staff.

The approved and adopted 2010 *White Flint Sector Plan* has the following recommendations for public schools on page 62 of the Plan:

The proposed residential development in the Sector Plan area will generate new students at each level, but primarily at the elementary school level. Projections from proposed development indicate the need for an additional elementary school, whereas new middle and high school students can be accommodated at the existing high school and middle school facilities.

- *There is no site large enough for a typical 10 to 12-acre elementary school site within the Sector Plan area. MCPS has identified two sites that are suitable for an elementary school. The preferred site is located on the White Flint Mall Property, along the southern boundary south of the proposed Nebel Street Extended. The second site is the Luttrell Property, in Block 1 of the NoBe District.*
 - *Designate an elementary school site in the southern portion of the White Flint Mall Property as the preferred site.*
 - *Designate the Luttrell Property as an alternative school site.*

The March 2017 Planning Board Draft of the Rock Spring Master Plan states:

If there is redevelopment within the Rock Spring Master Plan area, several sites may be appropriate for consideration for a public school through an optional method development project. Each and every site should be thoroughly evaluated for a potential school site under the optional method process, notwithstanding any previous development approvals. MCPS continues to implement its Capital Improvements Program, which provides near-term school capacity through school additions, school re-openings, revitalization/expansion projects, new construction, and school reassignments. (pages 43-44)

The public hearing drafts of the White Flint 2 Sector Plan and the Grosvenor-Strathmore Metro Area Minor Master Plan Amendment, which are under review by the Planning Board, have similar language to address public schools, particularly the Walter Johnson Cluster.

In addition to the master plan process, MCPS is evaluating long-term growth management strategies. In 2016, MCPS led a community roundtable discussion group that explored a wide range of approaches to accommodate near-term and long-term enrollment growth in the Walter Johnson Cluster. As a result of this process, MCPS led another working group that focused on reopening the former Charles W. Woodward High School to provide relief for high schools in the downcounty area. In addition, MCPS has stated that Rocking Horse Center, a former elementary school that is currently being used for MCPS

administrative offices and is located within the Downcounty Consortium in the White Flint 2 Sector Plan area, could be considered for a large school facility in the future.

As part of the recent Subdivision Staging Policy (SSP), the County Council passed Bill 37-16, which amended Section 52-58 of the Montgomery County Code (Attachment 9), in response to the established need for a school site(s) in this area and others in the County. This Bill established a new mechanism that allows a developer to earn credit against the Development Impact Tax for School Improvements such that “a property owner may receive credit for land dedicated for a school site, if the density calculated for the dedication area is excluded from the density calculation for the development site, and the Montgomery County School Board agrees to the site dedication.”

MCPS has indicated their desire to acquire a school site on this Property based on the established need in the area (Attachment 17). The Applicant has agreed to dedicate a 4.3-acre portion of the Property to MCPS for a school site, which reduces the density on the Property by nineteen units. Optional method development in the R-90 Zone allows for a maximum density of 4.39 units per acre. The Property is 74.83 acres, which would have allowed the Applicant a maximum of 328 units (74.83 acres * 4.39 units per acre). However, since the Applicant has agreed to dedicate the 4.3-acre school site, the base density is now calculated on the remaining 70.53 acres (74.83 – 4.3), which allows the Applicant a maximum of 309 units (70.53 acres * 4.39 units per acre).

Therefore, contingent upon the Montgomery County School Board accepting the dedication, Staff finds the Applicant qualifies for the Development Impact Tax Credit, which states that MCPS must review the dedication, verify the land value and time schedule for dedication, agree to the dedication, determine the amount of credit for the dedication, and certify this amount to the Department of Permitting Services before that Department issues any building permit.

Schools Test/Payment

Since this Preliminary Plan was submitted prior to January 1, 2017, the 2012-2016 Subdivision Staging Policy and FY2017 Annual School Test apply. The Property is in the Walter Johnson High School Cluster, which would have required a school facility payment at the high school level for all residential units. However, in accordance with Bill 38-16, the County will not be collecting any required school facility payments for building permit applications filed after March 1, 2017, but will instead collect an updated School Impact Tax on all applicable residential units. DPS will determine the amount and timing of the payment.

Parks

Early in the review process for this Application, the Department of Parks, in a memo to Staff (Attachment 5), indicated that there is a need for more parkland in the area and that the Applicant should set aside open space for parkland beyond the minimum required COS. At the same time, Staff recognized that there is a critical need for a new elementary school in the Walter Johnson Cluster (which includes this Property) and especially since the Ashburton Elementary School, which will serve children from the proposed subdivision, will likely face capacity issues in the near future. At Staff's request, the Applicant has agreed to dedicate a 4.3-acre portion of the site to MCPS in return for the impact tax credit per Bill 38-16 and Section 52-58 of the Montgomery County Code. Subsequently, the Department of Parks met with the Applicant to explore the possibility of acquiring additional land for parks purposes, but the Applicant and Parks were not able to come to agreement. On 6-2-17, the Department of Parks sent an email to Staff (Attachment 10) reiterating their position for more parkland in the proposed subdivision.

Staff recognizes that there are park amenity needs in the area, but given the more critical need for a school and the ability to address that need through the development review process via the newly enacted dedication in exchange for school impact tax credit mechanism, it is far more advantageous for the County to avail itself of this opportunity and acquire a school site in this subdivision. Staff believes that it is not fair to require the Applicant to provide land for these desired park uses in addition to the dedication for a school site. The proposed Preliminary Plan, with the school dedication, meets all the regulatory requirements and findings necessary for approval, and therefore Staff is not recommending acquisition of additional land for parks as a condition of approval. In discussions with Park and Planning Staff, MCPS has expressed a willingness to coordinate with the Parks Department and the Community to allow for recreational opportunities on the 4.3-acre school site until MCPS develops the site as a school.

Phased Adequate Public Facilities (APF) Validity

Applicant's Request

The Applicant has requested a 10-year APF Validity Period (Attachment 11) for the development of the proposed 309 units. The Applicant has not requested an extended preliminary plan validity period, and intends to plat the proposed lots and parcels within the standard plan validity period of 36 months. The Applicant's request for a 10-year (120 month) APF Validity Period is based on the following phasing schedule:

Phase I – Issuance of building permits for up to 150 residential units, which must include 12.5 % MPDUs, within 60 months from the 30th day after the Resolution is mailed; and

Phase II – Issuance of building permits for up to 159 residential units, which must include 12.5% MPDUs, within 60 months from the expiration date of the Phase I validity period.

The Applicant's objective is to construct and sell houses as quickly as possible, but notes that the market will ultimately control the construction schedule. Based on the Applicant's experience, they will be able to deliver approximately 50 houses per year. The Applicant states that while a five-year APF Validity Period is sufficient for a small residential subdivision, it is simply not adequate for a subdivision involving 309 residential lots, and that the Subdivision Ordinance contemplates this by providing a range of 5 to 10 years.

Furthermore, the Applicant states that it is in the public interest to provide upfront a realistic APF Validity Period to allow for implementation of the approved project. To do so otherwise will result in a waste of administrative resources and agency expense, by requiring Staff to process and the Planning Board to review the Applicant's extension request.

Staff Review

Pursuant to Section 50-20(c)(3)(A)(iv) of the Subdivision Regulations, the Planning Board can make an APF determination for "no less than 5 and no more than 10 years after the preliminary plan is approved, as determined by the Board at the time of approval, for any plan approved on or after August 1, 2007, and before April 1, 2009, or on or after April 1, 2015." However, in accordance with Sections 50-20(c)(3)(B) and 50-34(g) of the Subdivision Regulations, Staff does not believe the Applicant has provided sufficient information as to why the Planning Board should approve such a lengthy phasing schedule for completion of the project. Additionally, to allow a validity period longer than the minimum, the Planning Board must find that the extended validity period would promote the public interest. Nothing in the Applicant's request for an extended APF validity period meets this finding. Therefore,

Staff does not support the request for 10-year APF Validity Period and recommends that the Planning Board deny this request.

Other Public Facilities and Services

The proposed development will be served by public water and sewer systems. Fire and Rescue has reviewed the application and has determined that the Property has appropriate access for fire and rescue vehicles. Other public facilities and services including police stations, firehouses and health care are currently operating in accordance with the Subdivision Staging Policy and will continue to be sufficient following the construction of the project. Electric, gas and telecommunications services will also be available and adequate.

Conclusion

Based on the analysis and conditions above, Staff finds that Adequate Public Facilities exist to serve the proposed development.

ENVIRONMENT

Environmental Guidelines

Staff approved Natural Resources Inventory/Forest Stand Delineation (NRI/FSD) #420160220 on November 9, 2015. The approximately 74.83-acre property is predominantly an open field with 15.84 acres of forest around the perimeter. At the northeast corner of the Property, there is a small pocket of wetlands at the head of an intermittent stream, with 0.43 acres of stream valley buffer.

While the proposed development would disturb land within the stream valley buffer, no forest within the stream valley buffer will be removed and the unforested portions of the buffer will be planted with forest. The proposed project complies with the Environmental Guidelines by permanently protecting the entire stream valley buffer in Category I Conservation Easement.

Forest Conservation Plan

The site is subject to the Montgomery County Forest Conservation Law (Chapter 22A of the County Code) and the Applicant has submitted a Preliminary Forest Conservation Plan (Attachment 12) in conjunction with the Preliminary Plan. A Final Forest Conservation Plan must be submitted in conjunction with the Site Plan. There are 15.84 acres of high priority forest on site and an additional 0.52 acres of off-site forest in areas proposed to be disturbed. The Applicant is proposing to clear 5.61 acres of forest and retain 10.75 acres of forest. The proposed development has a 9.12-acre planting requirement, which the Applicant proposes to meet by planting 0.74 acres of forest on-site and purchasing 8.38 acres of credit in an off-site bank. All areas of stream valley buffer will be planted in forest and protected by a Category I Conservation Easement.

Minimum Retention

As per Sec. 22A-12(f)(2)(B) of Forest Conservation Law,

“In a planned development or a site developed using a cluster or other optional method in a one-family residential zone, on-site forest retention must be equal the applicable conservation threshold in subsection (a).

The Property is subject to the minimum retention provision because R-90 is a single-family zone and the Applicant is proposing to use the MPDU optional method of development. The conservation threshold

for this property is 20%, or 15.16 acres. The Applicant is retaining 10.75 acres, 4.41 acres below the requirement.

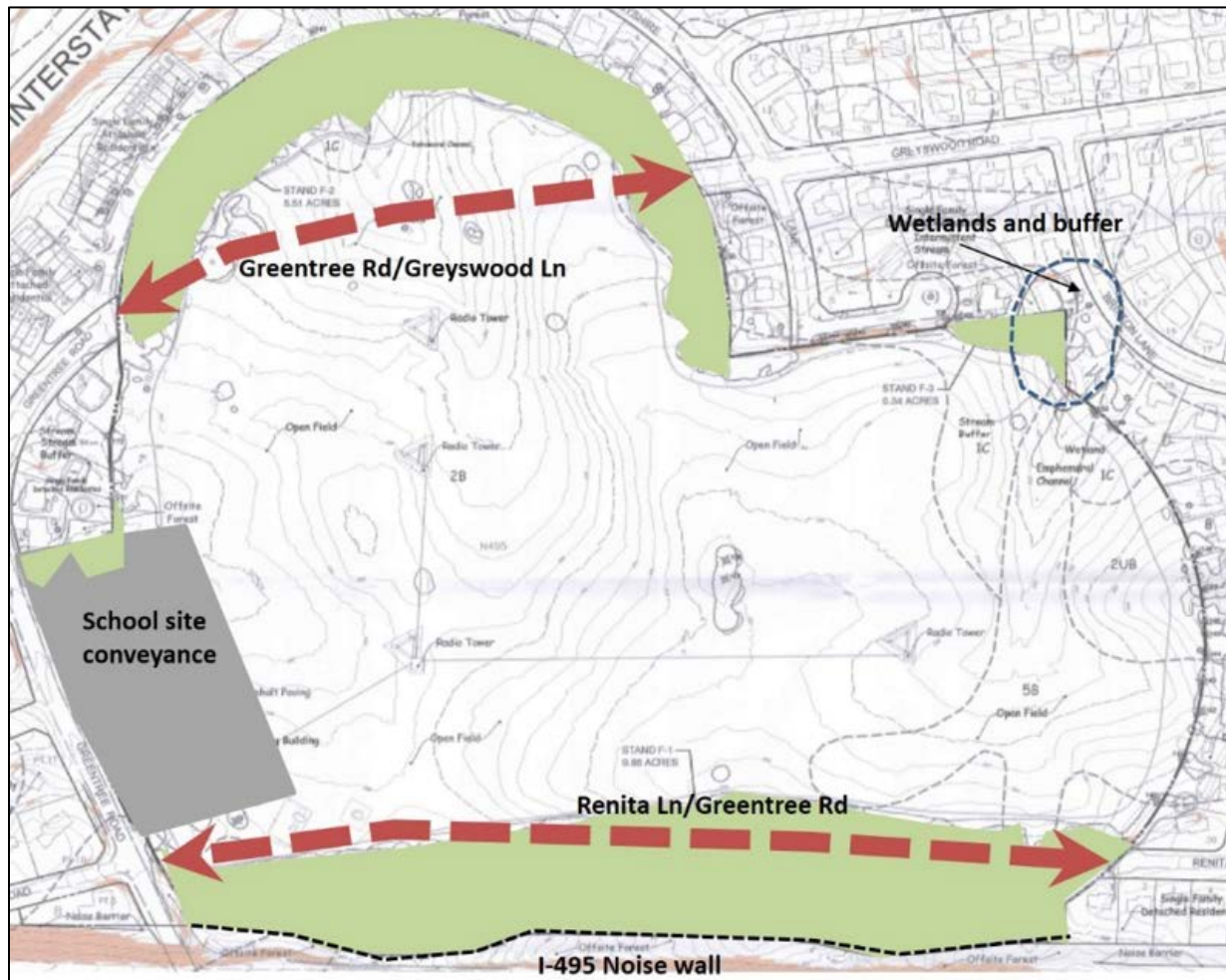


Figure 6: Constraints and Impacts

However, Sec. 22A-12(f)(3) allows flexibility in meeting this requirement.

"If the Planning Board or Planning Director, as appropriate, finds that forest retention required in this subsection is not possible, the applicant must provide the maximum possible on-site retention in combination with on-site reforestation and afforestation, not including landscaping."

It is not possible for the Applicant to maintain the entire 15.16-acre conservation threshold in forest on-site. This is not possible because of the following requirements associated with this development - roadway connections (including the Greentree Road/Greyswood Lane connection that is required in the Master Plan), and noise mitigation. Furthermore, based on a known need for school capacity in the area, the Applicant has agreed to dedicate a 4.3-acre school site. These requirements shape the form of the proposed development by limiting the development area and setting the alignment of major components of the on-site transportation network.

The following graphic demonstrates the specific areas of forest clearing, retention, and planting caused by the natural and imposed restrictions on the development. The Applicant has reduced areas of clearing by reconfiguring and rearranging stormwater management facilities and restricting roadway clearing primarily to areas within the right-of-way. The Applicant worked with MCDOT to provide a reduced right-of-way and pavement width along Renita Lane to save as much forest as possible. Additionally, the applicant is utilizing the planning and zoning measures available to cluster this development and retain as much forest as possible. The unit mix of 159 detached and 150 attached results in 49% attached units, which is very close to the maximum 50% allowed. In an effort to minimize the impact on forest, the proposed lot sizes have been kept close to the minimums permitted by the Zoning Ordinance (4,000 square feet for single-family detached, and 1,000 square feet for townhouses). The proposed lot sizes for townhouses range from just over 1,000 square feet to approximately 3,500 square feet for the larger corner/end units, while the majority of the townhouse units are approximately 1,500 square feet to 2,200 square feet in size. The single-family detached lot sizes range from approximately 5,000 square feet to approximately 11,000 square feet in size. The larger 11,000-square foot lots are located only on the eastern edge of the Property adjacent to the existing neighborhood. These lots were intentionally developed as larger lots to be more consistent with the development pattern of the adjoining properties. The majority of the proposed single-family detached lots are approximately 5,000 to 7,000 square feet in size. All areas of the site that can be planted with forest have been, including the wetland buffer, which further protects the wetlands. Given the constraints associated with this development, the Applicant is providing 10.75 acres of retention (the maximum possible on-site retention) coupled with 0.74 acres of afforestation (the maximum possible on-site afforestation). Staff recommends that the Planning Board find that, when all of the site constraints are considered, it is not possible for the Applicant to meet the minimum on-site retention.

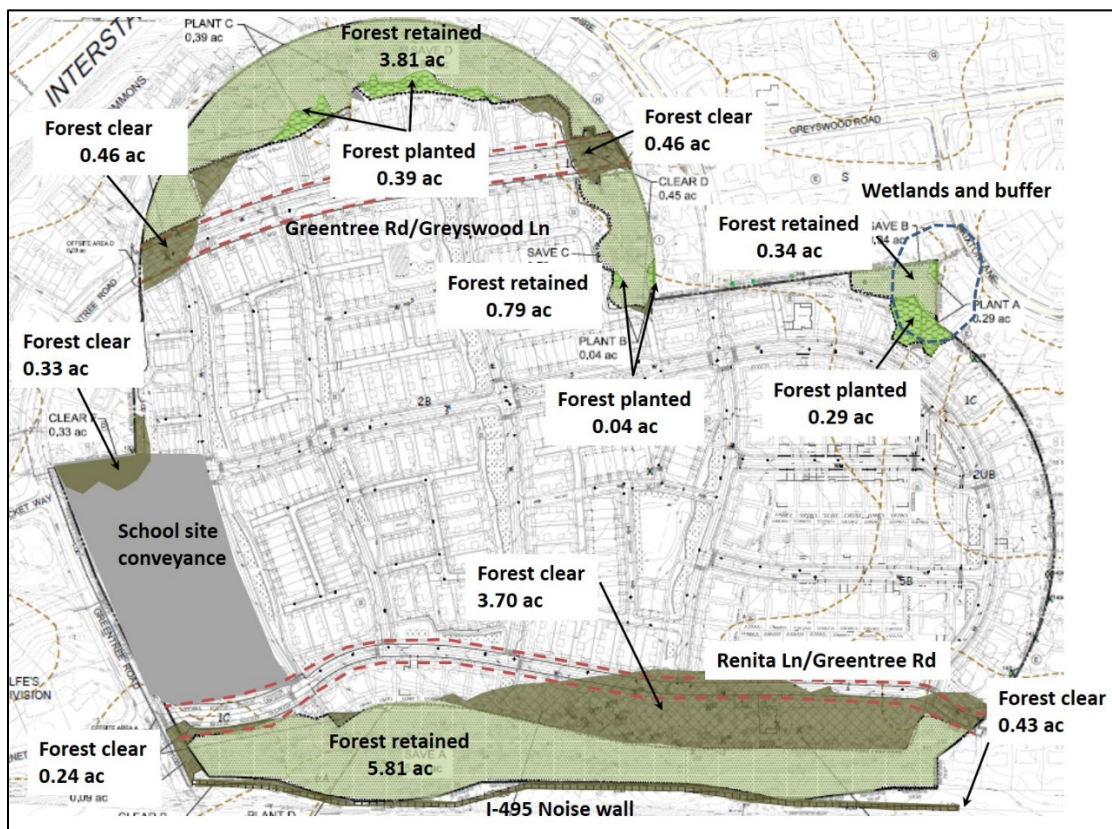


Figure 7: Forest Clearing, Retention, and Planting

Forest Conservation Variance

Section 22A-12(b) (3) of the County Code provides criteria that identify certain individual trees as high priority for retention and protection. The law requires a variance for any impact, including removal or disturbance within the tree's critical root zone (CRZ), to trees that are: 30 inches or greater Diameter at Breast Height (DBH); part of a historic site or designated with a historic structure; designated as National, State, or County champion trees; at least 75 percent of the diameter of the current State champion tree of that species; or trees, shrubs and plants that are designated as Federal or State rare, threatened, or endangered species. An applicant for a variance must provide certain written information in support of the required findings in accordance with Section 22A-21 of the County Forest Conservation Law.

On May 27, 2016, the Applicant submitted a variance request for the increased impacts to high priority trees (revised on October 27, 2016, March 27, 2017, and again on April 27, 2017 – Attachment 13), to remove 33 trees, listed in Table 3 below. The Applicant also proposes to impact, but retain, 16 trees that are considered high priority for retention listed in Table 4 below.

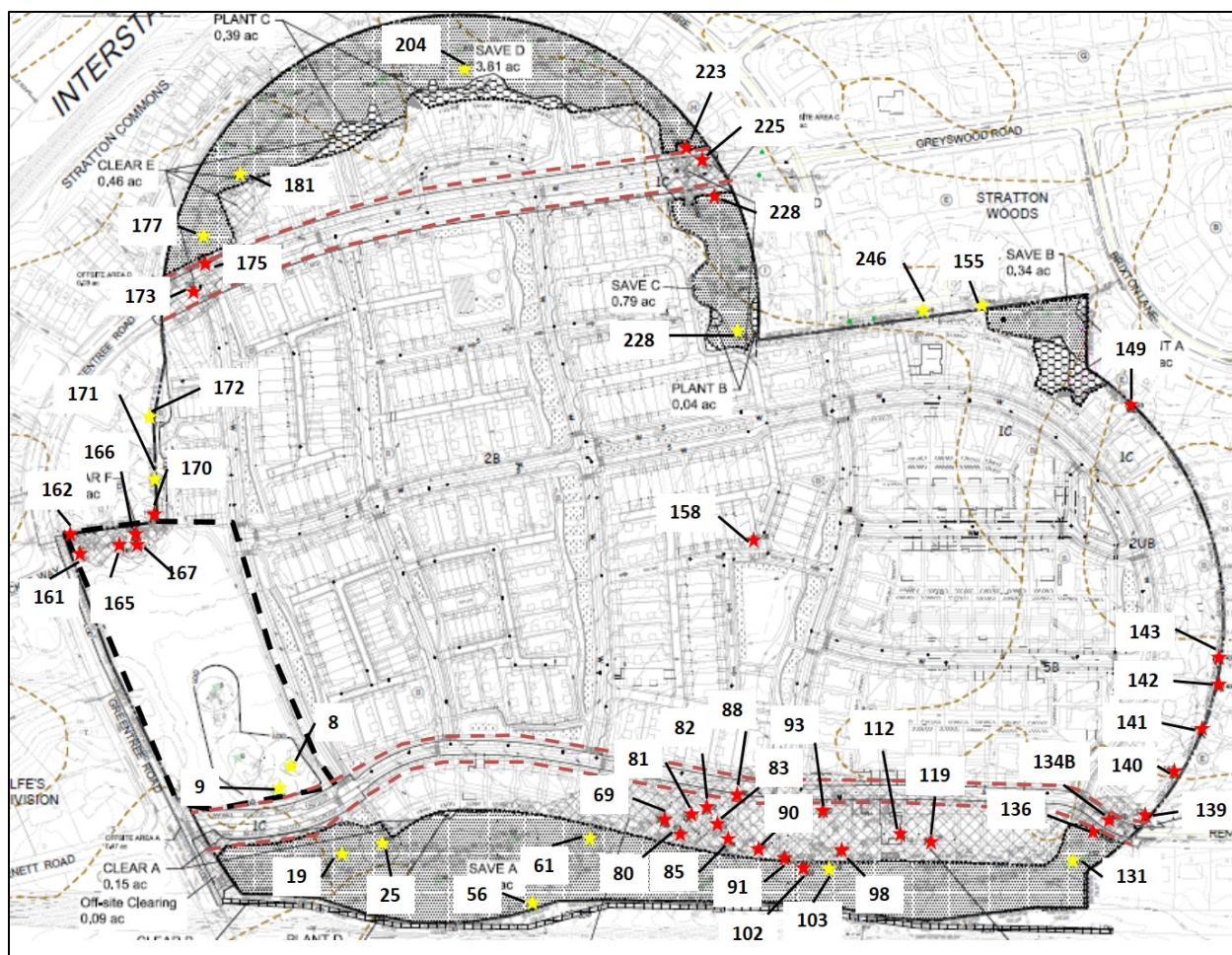
Table 3: Trees to be Removed

ID	Size	Species	Condition	Notes
69	35"	Tulip poplar	Good	Residential lot development
80	34"	Tulip polar	Fair	Residential lot development
81	33"	Tulip poplar	Good	Residential lot development
82	32"	Tulip poplar	Good	Residential lot development
83	30"	Tulip poplar	Good	Residential lot development
85	31"	Tulip poplar	Good	Residential lot development
88	35"	Tulip poplar	Fair	Renita Road construction
90	34"	Tulip poplar	Fair	Residential lot development
91	33"	Red maple	Poor	SWM and residential lot development
93	34"	Tulip poplar	Fair	Residential lot development
98	34"	Red maple	Poor	Residential lot development
102	38"	Tulip poplar	Fair	Residential lot development
112	30"	Tulip poplar	Fair	Residential lot development
119	31"	Tulip poplar	Fair	Residential lot development
134B	31"	Silver maple	Fair	Renita Road construction
136	31"	Red maple	Fair	Renita Road construction
139	31"	Silver maple	Fair	Renita Road construction/residential lot development
140	31"	Silver maple	Fair	Residential lot development
141	30"	Red maple	Fair	Residential lot development
142	35"	Red oak	Good	Residential lot development
143	40"	Sycamore	Good	Residential lot development
149	36"	Black cherry	Poor	Residential lot development
161	30"	Tulip poplar	Good	Grading/school site dedication
162	31"	White oak	Good	Grading/school site dedication
165	33"	Tulip poplar	Good	Grading/school site dedication
166	30"	Tulip poplar	Good	Grading/school site dedication
167	31"	Tulip poplar	Good	Grading/school site dedication
170	30"	Black walnut	Fair	Grading/school site dedication

ID	Size	Species	Condition	Notes
173	32"	Tulip poplar	Fair	Greentree Road/Greyswood Road construction
175	31"	Black cherry	Good	Greentree Road/Greyswood Road construction
223	33"	Tulip poplar	Fair	Greentree Road/Greyswood Road construction
225	31"	Tulip poplar	Fair	Greentree Road/Greyswood Road construction
228	34"	Tulip poplar	Good	Greentree Road/Greyswood Road construction

Table 4: Trees to be Impacted/Retained

ID	Size	Species	Condition	Notes
8	41"	Pin oak	Poor	Renita Road construction
9	34"	Red maple	Fair	Renita Road construction
19	35"	Tulip poplar	Good	Road construction and grading
25	32"	Tulip poplar	Good	SWM and grading
56	32"	Tulip poplar	Good	I-495 noise wall
61	31"	Tulip poplar	Good	SWM and grading
103	33"	Red maple	Fair	SWM and grading
131	31"	Tulip poplar	Good	SWM
155	43"	White oak	Fair	SWM
171	37"	Tulip poplar	Poor	Residential lot development
172	42"	Black gum	Fair	Residential lot development
177	31"	Tulip poplar	Fair	Greentree Road/Greyswood Road construction
181	51"	Red maple	Fair	Residential lot development
204	35"	Tulip poplar	Fair	Noise fence
243	40"	Tulip poplar	Fair	Road impact
246	34"	Red maple	Fair	Residential lot development



Variance Findings

Based on the review of the variance request and the proposed Forest Conservation Plan, Staff makes the following findings:

1. *Granting the variance will not confer on the applicant a special privilege that would be denied to other applicants.*

The disturbance to the specified trees is a result of developing a 74.83-acre site constrained by roadway connections, noise mitigation, required wetland protection, and dedication of the school site in the R-90 Zone. Granting the variance would not result in a special privilege that would be denied to other applicants.

2. *The need for the variance is not based on conditions or circumstances which are the result of the actions by the Applicant.*

The requested variance is not based on conditions or circumstances which are the result of actions by the Applicant. The Applicant is using the MPDU Optional Method, which allows the development of single-family attached units in the R-90 Zone. By using the Optional Method of development, the Applicant is able to constrain the limits of disturbance significantly more than using the Standard Method. Under the Standard Method of development, the Applicant would be able to clear all existing forest and variance trees, and take all forest conservation requirements off-site. The Optional Method allows for a mix of unit types and reduced lot sizes, which in turn, allows the development footprint to be reduced.

Additionally, the Applicant has reduced impacts to variance trees by reconfiguring and rearranging stormwater management features within public road rights-of-way and on individual residential lots. The Applicant has also minimized disturbance associated with roads by using retaining walls. Stormwater outfalls have been minimized and sited to avoid forest and variance trees.

Trees #9, #19, #82, #88, #93, #134B, #136, and #139 will be impacted or removed by the Greentree Road/Renita Lane connection, as well as the associated public utility easement and disturbance required to tie out to existing grades.

Trees #173, #175, #177, #223, #225, and #228 will be impacted or removed by the Greentree Road/Greyswood Road connection, as the associated public utility easement and disturbance required to tie out to existing grades.

Trees #161, #162, #165, #166, #167, and #170 will be removed due to rough grading of the school conveyance site and pedestrian connection to Greentree Road.

Trees #171, #172, #246, #155, #149, #143, #142, #141, and #140 will be impacted or removed at the property edge due to disturbance required to tie out to existing grades.

Tree #56 will be impacted by the noise wall along I-495.

Trees #8, #25, #61, #69, #80, #81, #83, #85, #90, #91, #98, #102, #103, #112, #119, #131, #158, #181, #204, and #228 will be impacted or removed due to residential lot development and associated infrastructure.

3. *The need for the variance is not based on a condition relating to land or building use, either permitted or non-conforming, on a neighboring property.*

The requested variance is a result of developing the Property with 159 single family detached units and 150 single family attached units and associated infrastructure and not a result of land or building use on a neighboring property.

4. *Granting the variance will not violate State water quality standards or cause measurable degradation in water quality.*

Granting the variance will not violate State water quality standards as none of the protected trees are located within the stream valley buffer and the unforested portion of the buffer will be planted with forest, which will enhance the function of the stream valley buffer. Additionally, the new trees proposed as mitigation for the loss of specimen trees will enhance the form and function of the existing tree canopy. Trees protect water quality by reducing runoff through rainfall interception and water uptake. The trees also provide shade for impervious areas and improve soil texture, which also results in improved water quality.

Mitigation for Protected Trees

Mitigation is recommended for protected trees that are to be removed but not for those impacted, but retained. Mitigation is also not recommended for the trees located within forest shown as removed and, therefore, already compensated for under Section 22A-12(c). Mitigation is recommended for the following five protected trees located outside of areas of forest removal: #140 31" Silver maple, #141 30" Red maple, #142 35" Red oak, #143 40" Sycamore, and #149 36" Black cherry. The proposed removal of five trees will be mitigated by plantings calculated at the rate of 1 caliper inch planted per 4-inch DBH lost. Using this ratio, the Applicant will be required to plant a total of 43 caliper inches of native canopy trees as mitigation for the protected tree impacts on the Property within one calendar year or two growing seasons after completion of road construction. The trees must be a minimum of three-inch caliper each and shown on the Site Plan.

County Arborist's Recommendation on the Variance

In accordance with Montgomery County Code Section 22A-21(c), the Planning Department is required to refer a copy of the variance request to the County Arborist in the Montgomery County Department of Environmental Protection for a recommendation prior to acting on the request. A response letter has not been received at time of the staff report posting.

Variance Recommendation

Staff recommends the variance be granted.

Noise

The Montgomery County "Staff Guidelines for the Consideration of Transportation Noise Impacts in Land Use Planning and Development" is used to review traffic noise impact on residential developments. In this area of the County, the Guidelines recommend a maximum value of 65 dBA Ldn for exterior recreation areas and 45 dBA Ldn for indoor residential spaces.

The Property is located directly to the north of I-495, the Capital Beltway, and between 950' and 250' east of the western spur of I-270. While there are noise barriers along most of I-495, the stretch adjacent to the Property does not have a barrier due to the existing land use. The Applicant was required to submit a noise analysis and did so on October 28, 2016 (dated October 26, 2016). An updated noise study was submitted on April 27, 2017 (dated April 25, 2017) which was identical except for the proposed noise mitigation along the I-270 spur (Attachment 14).

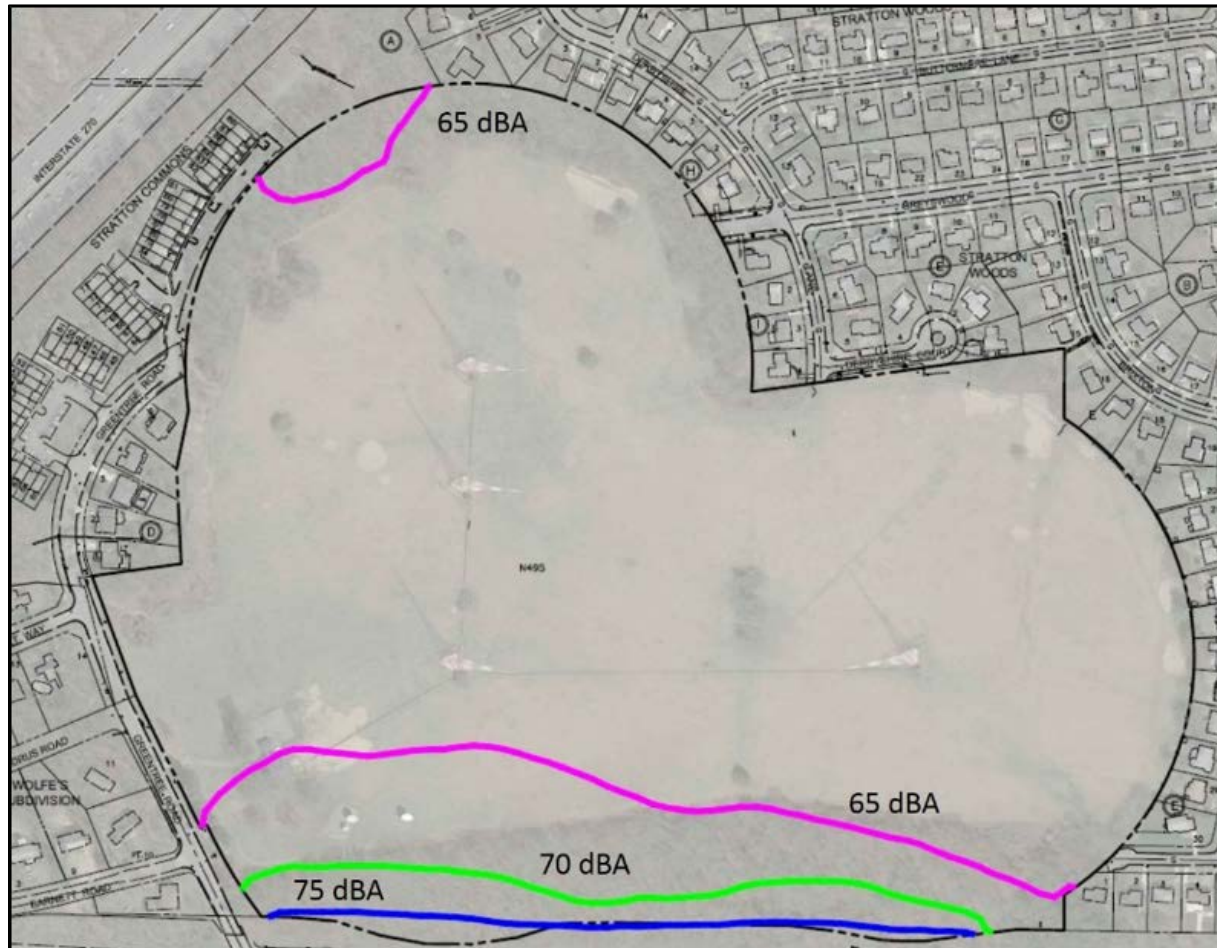


Figure 9: Current Noise (measured at ground level)

Measurements for the background noise analysis were taken over a 24-hour period on July 15 (Wednesday) – July 16 (Thursday), 2015. During the 24-hour measurement, noise levels were recorded and averaged over five-minute time intervals. Noise measurements were then used to calculate the site's 24-hour average day-night noise level (Ldn), which includes the 10dBA penalty for noise levels measured during nighttime hours due to increased sensitivity. Sound meters were placed at three different locations on the site and noise was measured at both the ground level (5') and upper level (25'). The data from this study, in conjunction with the site topography, was used to develop noise contours at both ground and upper levels. These contours show that, with the existing traffic levels, the site is currently impacted by noise from both I-495 and I-270 that is above the recommended 65 dBA Ldn level.

To adequately protect future residents, Staff asked the Applicant to model the noise impacts of the proposed development using 20-year projected traffic data. The future model was developed by altering the calibrated current model to include the projected roadway data, future site topography, and the buildings located within the future WMAL development. The most recent data published by the Maryland State Highway Administration (MDSHA) was used to estimate the future traffic volumes, with a conservative 2% increase in traffic compounded annually until 2035. The noise contours from this projection are then used to determine what kinds of mitigation techniques are appropriate and where they are to be placed.

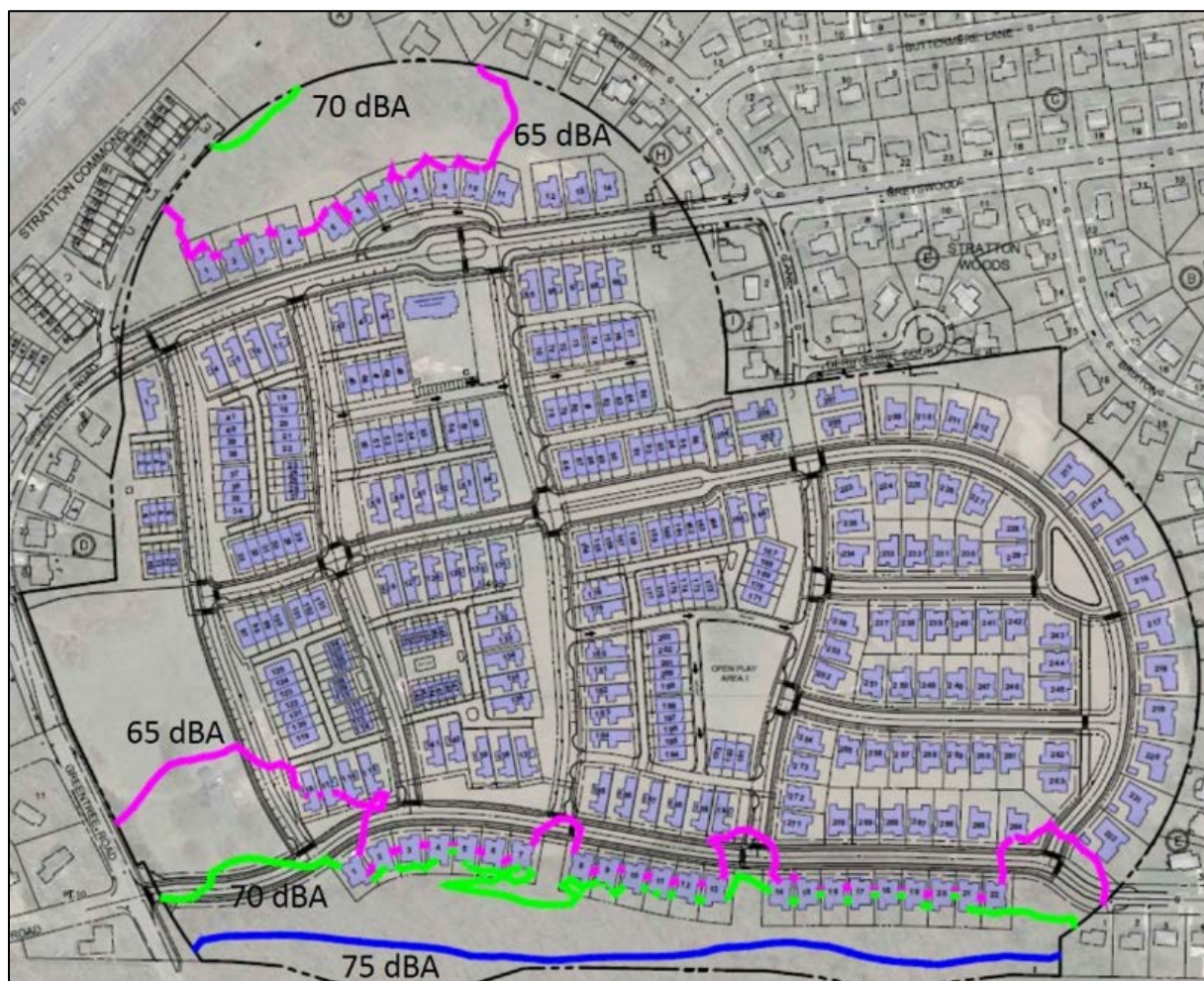


Figure 10: Future Model (showing projected unmitigated noise from I-495 at ground level)

Figure 10 above shows the projected unmitigated noise levels at the ground level with the proposed development. Numerous lots on the northern edge are impacted by noise at the 65 dBA level from I-270, and all of the lots on the southern edge are impacted by noise up to the 70 dBA level.

In order to mitigate outdoor noise levels to the 65 dBA level, the Applicant is proposing to construct a 30-foot-tall noise barrier along the I-495 right-of-way. The proposed wall will join the existing noise wall along I-495 to the east. After mitigation, all lots and open spaces on the southern edge of the development will meet the 65 dBA recommendation. When the school site is developed, noise from I-495 will have to be addressed.



Figure 11: Future Model (showing projected mitigated noise from I-495 at ground level)

While the projected ground level noise from I-270 is not as loud and affects fewer lots, it is more difficult to mitigate. There is not currently an opportunity within the I-270 right-of-way to construct a noise barrier. There are also numerous constraints with topography and hydrology.

The Applicant has explored two mitigation options for the noise generated by I-270. The first option was to create a noise barrier along the northern property line. Staff did not support this proposal because it created a division between the existing community and the new community. This option also had the potential to create an extra noise source by reflecting noise off of the proposed wall, back into the existing community.

The current mitigation proposal, as shown on the Preliminary Plan and Preliminary Forest Conservation Plan, is to construct 8' tall noise fences at the rear of the proposed residential units. While the current proposal successfully mitigates outdoor noise in the rear outdoor private spaces of the proposed units, the final timing and details of the structure(s) will be determined at Site Plan. The Applicant has agreed to continue to cooperate with SHA and Staff in connection with SHA's evaluation of a noise mitigation solution that potentially benefits both the existing community adjacent to I-270 and the proposed units on the Property.

Stormwater Management

DPS issued a letter accepting the Stormwater Management Concept for the WMAL site on May 1, 2017. The stormwater management concept proposes to meet required stormwater management goals via Environmental Site Design (ESD) to the maximum extent practicable (MEP) with the use of micro-bioretenion structures. Additional fifty-year control is provided on the northern end of the Property, because the Applicant is proposing to tie into an existing SWM pond on an adjacent property that was designed for a 50-year storm.

Staff remains concerned about the size and quantity of SWM facilities shown in the COS areas on the Preliminary Plan. Although SWM facilities are allowed in COS areas per the Zoning Ordinance, the primary purpose of COS areas is to provide recreational opportunities for residents and guests. Staff expects to see more detail of the proposed SWM facilities at the time of Site Plan review in order to more adequately evaluate the size and quantity of proposed SWM facilities in COS areas, and to determine how well the SWM facilities have been incorporated into the design and functionality of the COS areas.

Conclusion

Based on the analysis above and conditions in this report, Staff finds the proposed development is in compliance with M-NCPPC's *Environmental Guidelines* and the Forest Conservation Law, and

recommends that the Planning Board approve the PFCP with the conditions cited in this Staff Report. The variance approval is incorporated in the Planning Board's approval of the PFCP.

COMPLIANCE WITH THE SUBDIVISION REGULATIONS

This application has been reviewed for compliance with the Montgomery County Code, Chapter 50, the Subdivision Regulations. The proposed lot size, width, shape and orientation are appropriate for the location of the subdivision taking into account the recommendations in the North Bethesda/Garrett Park Master Plan, and for the type of development or use contemplated. The proposed lots meet all requirements established in the Subdivision Regulations and the Zoning Ordinance and substantially conform to the recommendations of the Master Plan. Access and public facilities will be adequate to serve the proposed lots, and the application has been reviewed by other applicable county agencies, all of whom have recommended approval of the plan (Attachment 15).

Table 5: R-90 Zoning Data Table for Optional Method Development

	Zoning Ordinance	Preliminary Plan
<u>ZONING:</u>		
Zone	R-90	R-90 Optional Method MPDU
<u>GROSS TRACT AREA:</u>		
Gross Tract Area =	5 AC. MIN.	74.83 AC.
Area of Dedications =		3.57 AC. (Public Roads)
		4.3 AC.
Net Lot Area =		66.96 AC.
<u>MAXIMUM DENSITY: 4.39 UNITS/AC. x 74.83 AC. = 328 UNITS</u>		
<u>UNIT TYPE:</u>		
Single Family Detached (SFD) Units =		159 51.46%
Townhouse (SFA) Units =	50% MAX.	150 48.54%
Maximum Proposed =	328	309
<u>NUMBER OF DWELLING UNITS (MAXIMUM):</u>		
Market Rate SFD Units		159
Market Rate Townhouse Units		110
MPDU ~ Townhouse Units		40
sub-total TH Units =		150
Market Rate Total Units (SFA & SFD)		269
MPDU ~ Total Units		40 12.5% + 1 unit
Maximum Total Units =		309
<u>OPENSOURCE:</u>		
Gross Lot Area =		74.83 AC. 3,259,595 SF
Common Open Space	15 % MIN. 11.22 AC. 488,939 SF	24.5 % 18.3 AC. 797,148 SF
<u>SITE COVERAGE:</u>		
Single Family Detached (SFD)	N/A	N/A
Townhouse (SFA)	40 % MAX.	11 %

LOTS:**Lot Area:**

Single Family Detached (SFD)	4,000 SF MIN.	4,000 SF
Townhouse (SFA)	1,000 SF MIN.	1,000 SF

Lot width at front building line:

Single Family Detached (SFD)	Determined at Site Plan
Townhouse (SFA)	

Lot width at front line:

Single Family Detached (SFD)	25' MIN.	25' MIN.
Townhouse (SFA)	14' MIN.	14' MIN.

Frontage on street or open space:

Single Family Detached (SFD)	Required
Townhouse (SFA)	

Lot Coverage:

Single Family Detached (SFD)	50 %	50 %
Townhouse (SFA)	N/A	N/A

Building Setbacks:**Front setback from public street:**

Single Family Detached (SFD)	25' MIN.	25'/10' MIN., See typical lot details
Townhouse (SFA)	25' MIN.	25' MIN.

Front setback from private street or open space:

Single Family Detached (SFD)	10' MIN.	10' MIN.
Townhouse	10' MIN.	10' MIN.

Side or rear setback:

Single Family Detached (SFD)	Determined at Site Plan
Townhouse (SFA)	

Rear setback, alley:

Single Family Detached (SFD)	4' MIN.	4' MIN.
Townhouse (SFA)	4' MIN.	4' MIN.

Height:**Principal building:**

Single Family Detached (SFD)	40' MAX.	40' MAX.
Townhouse (SFA)	40' MAX.	40' MAX.

PARKING:**Residential Uses**

<u>SFD (Market Rate) =</u>	<u>170 Units</u>	<u>159 Units</u>
2.00 space/unit	340 Spaces	636 Spaces
<u>Townhouse (Market Rate) =</u>	<u>116 Units</u>	<u>110 Units</u>
2.0 space/unit	232 Spaces	440 Spaces
<u>Townhouse (MPDU ~) =</u>	<u>42 Units</u>	<u>40 Units</u>
1.0 space/unit	84 Spaces	80 Spaces

Sub-Total Residential ^**

Market Spaces =	572 Spaces	1,076 Spaces
MPDU Spaces ~ =	84 Spaces	80 Spaces
Marked on street spaces (public)		53 Spaces
Marked on street spaces (private)		110

Total Parking =	656 Spaces Required	1,319 Spaces Provided (To be Determined at Site Plan)
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^Final dwelling unit count, unit mix, bedroom count, parking space quantity, public use space, recreation space and square footages (SF) will be determined at Site Plan approval.

Common Open Space (COS)

Per Section 59.4.4.8.C. of the Montgomery County Zoning Ordinance, 15% of COS is required since the Applicant is using the Optional Method of development in the R-90 Zone. While the COS exhibit

provided with the Preliminary Plan indicates that 11.2 acres are required, this calculation was based on the 74.83 acres instead of 70.53 acres after the 4.3-acre school site dedication. Thus, 10.58 acres of COS is required for the 70.53 acre project to meet the minimum 15% COS requirement. The Applicant is proposing to provide a total of 18.3 acres, or 25.9% as COS. The final amount of COS, including the design criteria per Section 59.6.3.5.B., will be evaluated in detail at the time of Site Plan review.

Per Section 59.6.3.5.A.2., COS is defined as, “an outdoor area that is intended for recreational use by residents and their visitors. Common open space does not include private individual lots.” While the Zoning Ordinance allows SWM facilities in COS areas, the purpose of COS areas is to provide recreational opportunities for residents and visitors. SWM facilities shouldn’t be allowed to the extent that they render the COS unusable for recreation. Although the Applicant has worked with Staff to reduce the size of the SWM facilities and improve the potential for recreational use in some of the COS areas, Staff would like to see more of this done at the time of Site Plan review.

Private Streets

Lot Frontage on a Private Street

Staff reviewed and approved the Applicant’s statement of justification for the Private Roads dated April 7, 2017 (Attachment 16). Section 50-29(a)(2) of the Subdivision Regulations requires that all lots shall abut on a street or road which has been dedicated to public use or which has acquired the status of a public road. Fifty-six (56) lots will front on a public street, while 253 lots will front onto a private street or open space. Therefore, if the Planning Board approves the Preliminary Plan, it must also find that the proposed private streets have acquired the status of public streets. As reflected in other similar cases approved by the Board, this finding must be based upon the proposed road being fully accessible to the public; accessible to fire and rescue vehicles, as needed; and designed to the minimum public road standards, except for right-of-way and pavement widths.

For this subdivision, the proposed private internal streets and alleys, which provide frontage to 253 lots, meet the minimum standards necessary to make the finding that they have attained the status of a public road. The private roads will be constructed to the minimum public road structural standards, will have a minimum 20-foot pavement width and adequate turning radii where needed for emergency access, an appropriate paving cross-section elsewhere for private vehicles, and an appropriate circulation and turnaround pattern. The private roads will be located within separate private road parcels, with a covenant and easement that ensures they are adequately maintained and remain fully accessible to the public.

Private streets are intended to provide necessary flexibility in right-of-way width and road design, that cannot be achieved under Chapter 49, in order to provide enhanced sidewalk, curb and crosswalk design features that promote pedestrian circulation. The proposed private streets are modified tertiary residential streets with approximately 42-foot-wide rights-of-way and 5-foot wide sidewalks. Private alleys are proposed as 20-foot-wide paved alleys with no sidewalks.

Most of the proposed private streets include five-foot-wide sidewalks, a green panel, and stormwater management facilities. Curb extensions are provided to narrow public street crossings to approximately 20 feet at intersections. This treatment will reduce pedestrian crossing distances and help calm traffic. On-street parking is also proposed on several private roads as depicted on the Preliminary Plan. The detailed cross section and special pavement of a narrow central street will be finalized at Site Plan. ADA-compliant features (i.e., handicap ramps and/or at-grade crossings) are shown on the proposed Preliminary Plan and must be shown on the final Certified Preliminary Plan and subsequent Site Plan.

CONCLUSION

Staff recommends approval of the Preliminary Plan based on the conditions and analysis contained in this report.