

Certificate of Adequacy

ADQ-2022-071

General Information	
Project Name: McKendree Road	
Case Number: ADQ-2022-071	
Associated Preliminary Plan of Subdivision or Final Plat: PPS-2022-02	5
Use Type: Residential	
Dwelling Unit Type and Number: 79 single-family attached units	Gross Floor Area (nonresidential): N/A
Project Location	
Project Location. On the north side of McKendree Road approximately 42	.0 feet west of its intersection with Robert Crain Highway (US 301)

Lot/Parcel: Parcel 15	Tax Account: 1147958, 3046042
Property Zone: RSF-A	Council District: 9
Planning Area: 85A	Municipality:
Election District: 11	Transportation Service Area: 2
Police District: 7	School Cluster Area:

APPLICABILITY OF PUBLIC FACILITY ADEQUACY STANDARDS

Facility	Level of Service Required	Adequacy Met (Yes/No/NA)	Conditions of Adequacy Approval (Yes/No)
Transportation:	LOS "D" (Critical Lane Volume of 1301-1450)	Yes	Yes
Service Area 2			
Pedestrian and Bikeway	Public Facilities provided in accordance with Section 24-4506	N/A	No
Parks and Recreation (Transit-Oriented/ Activity Center Zones and Employment Areas)	2.5 acres per 1,000 residents	N/A	No
Parks and Recreation (All Other Zones)	15 acres per 1,000	Yes	No
Police—Residential Use	25 minutes for non-emergency calls; 10 minutes for emergency calls	Yes	No
Fire and Rescue—Residential Use	7 minutes travel time	Yes	No
Fire and Rescue—Non-Residential Use	5 minutes response time	N/A	No
Schools	<105% capacity or mitigation in accordance with Section 24-4510(c)	Yes	No

This Certificate of Adequacy is issued in accordance with Section 24-4503 of the Subdivision Regulations of Prince George's County, Maryland and in accordance with the analysis contained in the following memorandums attached hereto:

• Special Projects Section (Walker to Diaz-Campbell, November 13, 2023)

- Department of Parks and Recreation (Thompson and Quattrocchi to Diaz-Campbell, December 8, 2023)
- Transportation Planning Section (Smith to Diaz-Campbell, December 4, 2023)



Based on the forgoing analysis, this Certificate of Adequacy is:

Approved Approved with the conditions (indicated here):

- Denied
- 1. Total development within the subject property shall be limited to uses which generate no more than 55 AM peak-hour trips and 63 PM peak-hour vehicle trips.
- 2. Prior to approval of a building permit for each single-family attached dwelling unit, the applicant and the applicant's heirs, successors, and/or assigns shall provide a fee calculated of \$1,338 per dwelling unit multiplied by (Engineering News Record Highway Construction Cost index at time of payment) / (Engineering News Record Highway Construction Cost Index for first quarter, 1993). All fees shall be paid to Prince George's County (or its designee) and can be indexed by any appropriate cost indices determined by the Prince George's County Department of Permitting, Inspections and Enforcement (DPIE) or Department of Public Works and Transportation (DPW&T).

SIGNATURE Plan

12/19/2023

Date of Approval

This certificate of adequacy is valid for 12 years from the date of approval, subject to the additional expiration provisions of Section 24-4503(c).

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION



Countywide Planning Division Special Projects Section 14741 Governor Oden Bowie Drive Upper Marlboro, Maryland 20772 TTY: (301) 952-4366 www.mncppc.org/pgco

November 13, 2023

MEMORANDUM

TO: Eddie Diaz-Campbell, Planner III, Subdivision Section, DRD

FROM: TW Tineya Walker, Planner I, Special Projects Section, CWPD

VIA: **BR** Bobby Ray, AICP, Supervisor, Special Projects Section, CWPD

SUBJECT: PPS-2022-025 McKendree Road ADQ-2022-071

Project Summary:

This project proposes to develop 79 lots and 15 parcels for the development of 79 single-family attached residential units located at 16400 McKendree Road, Brandywine, MD 20613. This preliminary plan of subdivision (PPS) application was accepted for processing by the Planning Department on October 18, 2023.

PPS-2022-025

The Certificate of Adequacy associated with preliminary plan PPS-2022-025 is being reviewed for public facility adequacy standards per Section 24-4502 as follows:

24-4502. Applicability

(b) Applicability of Public Facility Adequacy Standards

(2) An application listed in Section 24-4502(a) above¹ shall not be approved until a certificate of adequacy or conditional certificate of adequacy is approved in accordance with the procedures and standards of this Section. No certificate of adequacy or conditional certificate of adequacy shall be approved unless and until it is reviewed and approved in conjunction with one of the applications or subdivision reviews identified in Section 24-4502(a) above and Section 24-4503(a).

¹ 24-4502. Applicability

(a) Applications / Approvals Subject to this Section

This Section applies to:

⁽¹⁾ An application for a preliminary plan of subdivision (minor or major).

Water and Sewer:

24-4404.

In accordance with the Sustainable Growth and Agricultural Preservation Act (Map 3 of Plan 2035 Prince George's County Sustainable Growth and Agricultural Preservation Act of 2012 (SB236) Map, Adopted November 20th, 2012, as may be amended from time to time), the water and sewer standard for residential subdivisions is:

(a) A subdivision in the Sustainable Growth Tier I in the General Plan or applicable Functional Master Plan shall be served by public sewer.

The property is within Tier 1 of the Sustainable Growth Act. Tier 1 includes those properties served by public sewerage systems.

24-4405.

For purposes of determining whether water and sewerage complies with the standards of this Section, the location of the property within the appropriate service area of the Ten-Year Water and Sewerage Plan is deemed sufficient evidence of the immediate or planned availability of public water and sewerage and compliance with the standards for the provision of public sewer and water.

The 2018 Water and Sewer Plan placed this property in the Water and Sewer Category 4, "Community System Adequate for Development Planning"— Category 4 includes properties inside the envelope eligible for public water and sewer for which the subdivision process is required.

<u>Capital Improvement Program</u> (CIP):

The subject project is located in Planning Area 85A – "Brandywine & Vicinity". The *2024-2029 Fiscal Year Approved CIP* does not identify any new construction projects programmed for this planning area.

<u>Conformance to the Master Plan</u>: 24-4101. General

(b) Conform to Comprehensive Master Plan

(1) Preliminary plans of subdivision (minor and major) and final plats shall be consistent with the General Plan and shall conform to all applicable Area Master Plans, Sector Plans, or Functional Master Plans, and as referenced in Sections 24-3402(d) and 24-3402(e) of this Subtitle.

The 2013 Approved Subregion 5 Master Plan identifies goals for public facility adequacy in its vision and policy statement:

- Needed public facilities are provided at locations that effectively serve the existing and future population.
- Schools operate at 100 percent capacity or less to provide an effective, quality learning environment.
- Priority is given to funding public facilities to support development in the Developing Tier policy area.
- All new public facilities are constructed to LEED standards, or the equivalent and existing buildings will be retrofitted to make them energy efficient.

The proposed development will not impede achievement of the above-referenced goal. The analysis provided in this memo illustrates that, pursuant to adopted tests and standards, public safety facilities and Water & Sewer service are adequate to serve the proposed development. There are no police, fire and emergency medical service facilities, public schools, parks, or libraries proposed on the subject property.

The 2008 *Approved Public Safety Facilities Master Plan* also provides guidance on the location and timing of upgrades and renovations to existing facilities and construction of new facilities, however, none of its recommendations affect the subject site.

ADQ-2022-071

Police Facility Adequacy:

Per Section 24-4508 of the current Subdivision Regulations, the Planning Board's test for police adequacy involves the following:

24-4508. Police Facility Adequacy

(b)Adopted LOS Standard-Police

- (2) To demonstrate compliance with this LOS standard, the Chief of Police shall submit the following information, on an annual basis, to the Planning Director:
 - **(A)** A statement reflecting adequate equipment pursuant to studies and regulations used by the County, or the *Public Safety Master Plan* for police stations in the vicinity of the area of the proposed subdivision; and
 - (B) A statement by the Police Chief that the rolling 12-month average, adjusted monthly, for response times in the vicinity of the proposed subdivision is a maximum of 25 minutes total for non-emergency calls and a maximum of 10 minutes total for emergency calls for service. For the purposes of this Subsection, response time means the length of time from the call for service until the arrival of Police personnel on-scene or other police response, as appropriate.

The subject property is served by Police District VII, Fort Washington, located at 11108 Fort Washington Road, 20744. Consistent with the provisions of Section 24-4508 correspondence was received from representatives of the Prince George's County Police Department dated October 18, 2023, that stated the Department "has an adequate amount of equipment for our current sworn officers".

Pursuant to Section 24-4508.B the subject police response times for the site meet the standard of 25 minutes for non-emergency calls and 10 minutes for emergency calls. The test is applied on the date the application is accepted or within the following three (3) monthly cycles. The times are based on a rolling average for the preceding 12 months. The application was accepted by the Planning Department on October 18, 2023.

J	Reporting Cycle Reporting Month		Priority	Non-Priority	
	Acceptance Date	October 2023	8:03 minutes	9:57 minutes	
	Acceptance Date	October 2025	o:05 minutes	9:57 IIIIIutes	

Police Response Times (Section 24-4508.B) District VII

Fire and Rescue Adequacy:

Per Section 24-4509 of the current Subdivision Regulations, the Planning Board's test for fire and rescue adequacy involves the following:

24-4509. Fire and Rescue Adequacy

(b) Adopted LOS Standard for Fire and Rescue

- (1) The population and/or employees generated by the proposed subdivision, at each stage of the proposed subdivision, will be within the adequate coverage area of the nearest fire and rescue station(s) in accordance with the *Public Safety Guidelines*.
- (2) The Fire Chief shall submit to the County Office of Audits and Investigations, County Office of Management and Budget, and the Planning Director:
 - (A) A statement reflecting adequate equipment in accordance with studies and regulations used by the County, or the *Public Safety Master Plan* for fire stations in the vicinity of the area where the subdivision is proposed to be located; and
 - **(B)** A statement by the Fire Chief that the response time for the first due fires and rescue station in the vicinity of the proposed subdivision is a maximum of seven minutes travel time. The Fire Chief shall submit monthly reports chronicling actual response times for calls for service during the preceding month.
- (3) Subsection (b)(2), above, does not apply to commercial or industrial applications.

Table 24-4502 ("Summary of Public Facility Adequacy Standards") of the current Subdivision Regulations requires a fire and rescue standard of seven (7) minutes response time for any residential uses. The Fire Department uses the metric of "travel time" in their evaluation. Response time adds one minute of 'turn-out" time which is assessed at the time the station receives notice and initiates a response. Therefore, the six-minute travel time is the same metric as the sevenminute response time.

The subject property is served by Brandywine VFD #840 located at 13809 Brandywine Road, as the first due station. Prince George's County Fire and EMS Department representative, James V. Reilly, stated in writing (via email) that as of October 31, 2023, the subject project passes the 7-minute response time test from the closest Prince George's County Fire/EMS Station, Brandywine VFD Co. 840.

PPS-2022-025 and ADQ-2022-071 Page 5

Schools Adequacy:

Per Section 24-4510 of the current Subdivision Regulations, the Planning Board's test for school adequacy involves the following:

24-4510. Schools Adequacy

(b) Adopted LOS Standard for Schools

(2) The adopted LOS standard is that the number of students generated by the proposed subdivision at each stage of development will not exceed 105 percent of the state rated capacity, as adjusted by the School Regulations, of the affected elementary, middle, and high school clusters.

The subject property is located within Cluster 6, as identified in the *Pupil Yield Factors & Public-School Clusters* 2022-2023 Update. The project proposes to add 79 single family attached units.

The adopted "level of service" standard is the number of students generated by the proposed subdivision at each stage of development will not exceed 105 percent of the state rated capacity of the affected elementary, middle, and high school clusters. Schools at all levels will continue to operate at a capacity below 105%. Payment of the School Facilities Surcharge per Section 25-4510 (c) of the Subdivision Regulations satisfies the mitigation requirements.

	Affected School Cluster				
	Elementary School Cluster 6	Middle School Cluster 6	High School Cluster 6		
Single-Family Attached Dwelling Units	79	79	79		
Pupil Yield Factor (PYF) – SFA	0.146	0.069	0.087		
SFA x PY=Future Enrollment	12	5	7		
Adjusted Student Enrollment 9/30/22	6,903	4,499	3,952		
Total Future Student Enrollment	6,915	4,504	3,959		
State Rated Capacity	8,442	4,768	5,206		
Percent Capacity	82%	94%	76%		

Impact on Affected Public School Clusters

Section 10-192.01 establishes school surcharges and an annual adjustment for inflation, unrelated to the provision of Subtitle 24. The current amount is **\$11,560** per dwelling if a building is located between Interstate 495 and the District of Columbia; **\$11,560** per dwelling if the building is included within a Basic Plan or Conceptual Site Plan that abuts an existing or planned mass transit rail station site operated by the Washington Metropolitan Area Transit Authority; or **\$19,826** per dwelling for all other buildings. This project is outside of the I-495 Capital Beltway; thus, the surcharge fee is **\$19,826**. This fee is to be paid to Prince George's County Department of Permitting, Inspections and Enforcement (DPIE) at the time of issuance of each building permit.

PPS-2022-025 and ADQ-2022-071 Page 6

CONCLUSION

At the writing of this referral the Special Projects Section finds that the applicable public facility standards are met pursuant to 24-4500 of the Subdivision Regulations.



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Department of Parks and Recreation 6600 Kenilworth Avenue Riverdale, Maryland 20737

MEMORANDUM

SUBJECT:	PPS-2022-025 McKendree Road
	Land Acquisition & Development Review Section Park Planning and Environmental Stewardship Division Department of Parks and Recreation
FROM:	Dominic Quattrocchi, Planning Supervisor DAQ Ivy R. Thompson, AICP, Planner III IRT
VIA:	Sonja Ewing, Division Chief SME Park Planning & Environmental Stewardship Department of Parks and Recreation
ТО:	Eddie Diaz-Campbell, Planner III Subdivision Section, Development Review Division, Planning Department
DATE:	December 8, 2023

The Department of Parks and Recreation (DPR) has reviewed and evaluated this Preliminary Plan of Subdivision (PPS) application as it pertains to public parks and recreational facilities.

PROPOSAL

This application is for the development of 79 lots for single-family attached dwellings and 13 parcels.

BACKGROUND

This 12.6-acre property, zoned Residential Single-Family Attached (RSF-A), is located on the north side of McKendree Road, approximately 400 feet west of its intersection with US 301 (Crain Highway) in Brandywine, MD.

Master Plan Conformance

The property is subject to the 2013 *Approved Subregion 5 Master Plan; Plan Prince George's 2035 Approved General Plan;* the 2022 *Land Preservation, Parks and Recreation Plan for Prince George's County,* and *Formula 2040, Functional Master Plan for Parks, Recreation and Open Space.* Parks staff reviewed this preliminary plan of subdivision for conformance to the master plan per Subdivision Regulations Sections 24-4101(b) and 24-4402. The *2013 Approved Subregion 5 Master Plan* provides goals and policies related to parks and recreation (pages 135-140). The *2013 Approved Subregion 5 Master Plan* indicates that M-NCPPC owns approximately 261 acres of parkland in the planning area. The plan recommends the proposed acquisition of additional land along the Timothy Branch. The proposed development aligns with the intention of the master plans to provide natural undeveloped land in the sub-region and to support existing development for future residents.

Parks & Recreation Adequacy [Section 24-4507]

Staff analysis has determined that the project, as shown, will generate an additional 215 people in the local community.

Per 24-4507(b)(1)(B) of the Prince George's County Subdivision Regulations 15 acres of improved public parks per 1,000 residents is the adopted Level of Service standard for Parks and Recreation in Prince George's County. The draft 2022 Land Preservation, Parks, and Recreation Plan (LPPRP) shows that there are 35 acres of improved public parkland per 1,000 persons in the county.

Therefore, Parks staff finds the LOS adequate.

Separate from the evaluation of Parks & Recreation Adequacy, the Mandatory Dedication requirements must be met, as discussed below.

FINDINGS:

The prior Prince George's County Subdivision Regulations Section 24-4600 which relate to the Mandatory Dedication of Parkland, provides for the dedication of land, the payment of a fee-in-lieu, and/or the provision of private onsite recreational facilities. The mandatory parkland dedication requirement is being met per Section 24-4601(b)(4)(A)(i) which permits "the dedication of land identified for preservation as part of a stream valley park on a Functional Master Plan, Area Master Plan, or Sector Plan, with a finding there is reasonable active recreation in the general area, and that any trails shown on the plans are provided and dedicated" to conform to the mandatory Parkland Dedication requirement. As previously stated, the 2013 Approved Subregion 5 Master Plan recommends the proposed acquisition of additional land along the Timothy Branch Stream Valley Park. The applicant is conveying Parcel A which is the Timothy Branch Stream Valley and is developing a spur of Timothy Branch Trail. The dedication of Parcel A and the Timothy Branch Trail aligns with the Subregion 5 Plan and the Master Plan of Transportation recommendations. Park and recreation amenities serving the subject property include the Rose Creek Connector Trail, located in the Rose Creek Estates community adjacent to the proposed McKendree Road development. This trail continues in the Chaddsford community, located north of the subject property. Other Park facilities include the Southern Area Aquatic and Recreation Complex (SAARC) approximately 4.5 miles northeast of Dobson Farms, Brandywine-North Keys Park located 6 miles northeast. and Accokeek East Park approximately 5 miles southeast. Also, Cedarville State Forest is located 3.5 miles east of the proposed development site. Recognizing the applicant's need to provide onsite woodland conservation to meet the requirements of the Woodland Conservation Ordinance, DPR staff supports the placement of woodland conservation easements on lands to be dedicated to M-NCPPC.

RECOMMENDATION

The Park Planning & Development Division of DPR recommends to the Planning Board approval of Preliminary Plan of Subdivision PPS-2022-025 subject to the following conditions:

- 1. Approximately 4.62 + acres (Parcel A) of the Timothy Branch Stream Valley shall be conveyed to the Maryland-National Capital Park and Planning Commission (M-NCPPC) as mandatory parkland dedication. The land shall be conveyed prior to the signature of the record plat for the subdivision with the following conditions:
 - a) An original, special warranty deed for the property to be conveyed, (signed by the WSSC Assessment Supervisor) shall be submitted to the Subdivision Section of the Development Review Division at M-NCPPC, along with the application of the record plat.

- b) The M-NCPPC shall be held harmless for the cost of public improvements associated with land to be conveyed, including but not limited to, sewer extensions, adjacent road improvements, drains, sidewalls, curbs and gutters, and front-foot benefit charges prior to and subsequent to application of the building permit.
- c) The boundaries and acreage of land to be conveyed to the M-NCPPC shall be indicated on all development plans and permits, which include such property.
- d) The land to be conveyed shall not be disturbed or filled in any way without the prior written consent of the DPR. If the land is to be disturbed, the DPR shall require that a performance bond be posted to warrant restoration, repair or improvements made necessary or required by the M-NCPPC development approval process. The bond or other suitable financial guarantee (suitability to be judged by the General Counsel's Office, The M-NCPPC) shall be submitted to the DPR within two weeks prior to applying for grading permits.
- e) All waste matter of any kind shall be removed from the property to be conveyed. All wells shall be filled, and underground structures shall be removed. The DPR shall inspect the site and verify that land is in an acceptable condition for conveyance, prior to dedication.
- f) Storm drain outfalls shall be designed to avoid adverse impacts on land to be conveyed to or owned by the M-NCPPC. If the outfalls require drainage improvements on adjacent land to be conveyed to or owned by the M-NCPPC, the DPR shall review and approve the location and design of these facilities. The DPR may require a performance bond and easement agreement prior to issuance of grading permits.
- g) No storm water management facilities, or tree conservation or utility easements shall be proposed on land owned by or to be conveyed to the M-NCPPC without the prior written consent of the DPR. The DPR shall review and approve the location and/or design of these features. If such proposals are approved by the DPR, a performance bond, maintenance and easement agreements shall be required prior to the issuance of grading permits.
- 2. The applicant shall include a copy of the letter consenting to the placement of woodland conservation easements on lands to be dedicated to the Maryland-National Capital Park and Planning Commission as part of the record for PPS-2022-025 and all subsequent applications.
- 3. The applicant, his successors, and/or assigns shall construct the Master Planned Timothy Branch Trail unless otherwise modified at the time of the Detailed Site Plan. The Master Planned Trails shall be designed in accordance with the standards outlined in the <u>Parks and Recreation Facilities</u> <u>Design Guidelines</u>. The timing of construction of the Master Planned Trails shall be determined with the approval of the Detailed Site Plan.
- 4. Prior to submission of the final plat of subdivision for any residential lot/parcel, the applicant, and the applicant's heirs, successors, and/or assignees shall submit three original executed public recreational facilities agreements (RFAs) to the Prince George's County Department of Parks and Recreation (DPR) Park Planning & Development Division (PP&D) for construction of

PPS-2022-025 McKendree Road Subdivision

recreational facilities, for approval. Upon approval by PP& D staff, the RFA shall be recorded among the Prince George's County Land Records and the Liber and folio of the RFA shall be noted on the final plat prior to plat recordation. The public RFA shall establish the timing for the construction of the offsite recreational facilities.

- Prior to approval of building permits for residential development, the applicant and the applicant's heirs, successors, and/or assignees shall submit a performance bond, letter of credit, or other suitable financial guarantees to the Prince George's County Department of Parks and Recreation (DPR) – Park Planning & Development Division (PP&D), for the construction of recreational facilities.
- 6. Prior to approval of a final plat, the applicant and the applicant's heirs, successors, and/or assignees shall provide a draft Public Use Access Easement Agreement or Covenant for Timothy Branch Trail, to the Maryland-National Capital Park and Planning Commission (M-NCPPC), Department of Parks and Recreation, for approval. The easement agreement shall contain the rights of M-NCPPC, be recorded in land records, and the Liber/folio shown on the final plat, prior to recordation. The final plat shall reflect the location and extent of the easement, in accordance with the approved preliminary plan of subdivision.

cc: Alvin McNeal

 $| \vee | | \vee$

MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION



Countywide Planning Division Transportation Planning Section 14741 Governor Oden Bowie Drive Upper Marlboro, Maryland 20772 TTY: (301) 952-4366 www.mncppc.org/pgco

301-952-3680

December 4, 2023

MEMORANDUM

TO:	Eddie Diaz-Campbell, Subdivision Section, Development Review Division
FROM <i>MS</i>	Noelle Smith, AICP Transportation Planning Section, Countywide Planning Division
VIA: CHE	Crystal Saunders-Hancock, Transportation Planning Section, Countywide Planning Division

SUBJECT: ADQ-2022-0071: McKendree Road

<u>Proposal</u>

The referenced Certificate of Adequacy (ADQ) application is being reviewed in conjunction with Preliminary Plan of Subdivision (PPS) PPS-2022-025, which proposes the subdivision of land for the development of 79 single family attached residential units. The Transportation Planning Section's (TPS) review of the referenced ADQ application was evaluated under the current zoning ordinance and subdivision regulations.

<u>Criteria for Establishing Transportation Adequacy</u>

The proposed development is subject to the Transportation Service Area 2 adequacy requirements for site-generated traffic impacts. The study area and critical intersections were scoped and approved by staff. The property is located within the RSF-A zoning district and therefore is not subject to the bicycle and pedestrian adequacy requirements, described in Section 24-4502 and the "2022 Transportation Review Guidelines Supplement".

Analysis of Traffic Impacts

The applicant has submitted a full traffic impact study (TIS) at the request of staff. This study is used as the basis for a determination of adequacy.

The subject property is located within Transportation Service Area (TSA) 2, as defined in the *Plan Prince George's* 2035 *Approved General Plan*. As such, the subject property is evaluated according to the following standards:

<u>Links and Signalized Intersections</u>: Level-of-Service (LOS) D, with signalized intersections operating at a critical lane volume (CLV) of 1,450 or better.

Unsignalized Intersections:

For two-way stop-controlled intersections a three-part process is employed:

ADQ-2022-071: McKendree Road December 4, 2023 Page 2

(a) vehicle delay is computed in all movements using the *Highway Capacity Manual* (Transportation Research Board) procedure; (b) the maximum approach volume on the minor streets is computed if delay exceeds 50 seconds, (c) if the delay exceeds 50 seconds and at least one approach volume exceeds 100, the CLV is computed.

For all-way stop-controlled intersections a two-part process is employed: (a) vehicle delay is computed in all movements using the *Highway Capacity Manual* (Transportation Research Board) procedure; (b) if the delay exceeds 50 seconds, the CLV is computed.

Trip Generation

As mentioned, the PPS application proposes the subdivision of land for residential units. The table below summarizes trip generation for the site and will be used in reviewing traffic impacts generated by the site and for developing a trip cap for the site:

TRIP GENERATION SUMMARY: ADQ-2022-071								
			AM Peak Hour PM Peak Hour					
Land Use	Quantity	Metric	In	Out	Total	In	Out	Total
Townhomes	79	Units	11	44	55	41	22	63
Total Trip Cap Recommendation			55			63		

The latest TIS includes the analysis of the LOS for all critical intersections. As previously mentioned, adequacy for the peak hour periods at all signalized intersections is acceptable within TSA 2, when LOS D or better is met per Section 24-4502 of the subdivision regulations and the Transportation Review Guidelines (TRG) Supplement. The traffic generated by the proposed PPS would impact the following intersections and links in the transportation system:

- US 301 / McKendree Road / Cedarville Road (signalized)
- McKendree Road / W Site Access (unsignalized)
- McKendree Road / E Site Access (unsignalized)

Existing Traffic

The following critical intersections, interchanges, and links identified above, when analyzed with existing traffic and existing lane configurations, operate as follows:

EXISTING TRAFFIC CONDITIONS					
Intersection	Critical Lane Volume (AM & PM)		Level of Service (LOS, AM & PM)		
US 301 / McKendree Road / Cedarville Road (signalized)	1151	1775	С	F	
McKendree Road / W Site Access (unsignalized) (NB approach)	-	-	-	-	
McKendree Road / W Site Access (unsignalized) (SB approach)	-	-	-	-	

McKendree Road / E Site Access (unsignalized) (SB approach)	-	-	-	-
*In analyzing unsignalized intersections, average ver the intersection is measured in seconds of vehicle d greatest average delay for any movement within the delay exceeding 50.0 seconds indicates inadequate suggest that the parameters are beyond the normal interpreted as a severe inadequacy.	elay. The nur e intersection traffic operat	nbers shown 1. According t tions. Values s	indicate th o the Guid shown as "	ne elines, +999"

The TIS indicates that the existing intersection is operating below the identified threshold.

Background Traffic

There are no critical intersections identified above that are programmed for improvements with 100 percent construction funding within the next six years in the current Maryland Department of Transportation "Consolidated Transportation Program" or the Prince George's County "Capital Improvement Program."

A growth of 2 percent was applied over 6 years. A second analysis was done to evaluate the impact of the background developments. The analysis revealed the following results:

BACKGROUND TRAFFIC CONDITIONS					
Intersection	Critical Lane Volume (AM & PM)		Level of Service (LOS, AM & PM)		
US 301 / McKendree Road / Cedarville Road (signalized)	1916 2580		F	F	
McKendree Road / W Site Access (unsignalized) (NB approach)	12.8 sec	16.9 sec	-	-	
McKendree Road / W Site Access (unsignalized) (SB approach)	-	-	-	-	
McKendree Road / E Site Access (unsignalized) (SB approach)	-	-	-	-	
*In analyzing unsignalized intersections, average vehicle delay for various movements through the intersection is measured in seconds of vehicle delay. The numbers shown indicate the greatest average delay for any movement within the intersection. According to the Guidelines, delay exceeding 50.0 seconds indicates inadequate traffic operations. Values shown as "+999" suggest that the parameters are beyond the normal range of the procedure and should be interpreted as a severe inadequacy.					

The TIS indicates that the existing intersection is operating below the identified threshold.

Total Traffic

The following critical intersections identified above, when analyzed with total future traffic and proposed improvements, as developed using the Guidelines including the site trip generation as described above. The analysis revealed the following results:

TOTAL TRAFFIC CONDITIONS					
	Critical La	ne Volume	Level of Service		
Intersection	(AM a	& PM)	(LOS, AM & PM)		
US 301 / McKendree Road / Cedarville Road	1919	2584	F	F	
(signalized)					
McKendree Road / W Site Access (unsignalized)	12.8 sec	17.2 sec	Pass	Pass	
(NB approach)					
McKendree Road / W Site Access (unsignalized)	20.1 sec	30.3 sec	Pass	Pass	
(SB approach)					
McKendree Road / E Site Access (unsignalized)	15.4 sec	22.4 sec	Pass	Pass	
(SB approach)					
*In analyzing unsignalized intersections, average ve	ehicle delay fo	or various mo	vements t	hrough	
the intersection is measured in seconds of vehicle d	elay. The nur	nbers shown	indicate th	ne	
greatest average delay for any movement within the					
delay exceeding 50.0 seconds indicates inadequate traffic operations. Values shown as "+999"					
suggest that the parameters are beyond the normal range of the procedure and should be					
interpreted as a severe inadequacy.					

The analysis of the total traffic conditions conclude that the site access points will operate at acceptable levels. However, the intersection of US 301, McKendree Road and Cedarville Road operate below the identified threshold.

It is recommended that the applicant contributes a fee to the Brandywine Road Club in lieu of constructing off-site improvements at this intersection. The TIS indicates that traffic impacts to these intersections can be offset through a pro-rata contribution for planned roadway improvements as provided in the Brandywine Road Club.

The subject property is located within Planning Area 85A and is affected by the Brandywine Road Club. Specifically, CR-9-2017 indicates the following:

- 1. Establishes the use of the Brandywine Road Club for properties within Planning Areas 85A and 85B as a means of addressing significant and persistent transportation deficiencies within these planning areas.
- 2. Establishes a list of projects for which funding from the Brandywine Road Club can be applied.
- 3. Establishes standard fees by development type associated with the Brandywine Road Club to be assessed on approved development.

This resolution works in concert with CB-22-2015, which permits participation in roadway improvements as a means of demonstrating adequacy for transportation, as required in Section 24-124. Specifically, CB-22-2015 allows the following:

ADQ-2022-071: McKendree Road December 4, 2023 Page 5

- 1. Roadway improvements participated in by the applicant can be used to alleviate any inadequacy, as defined by the Guidelines. This indicates that sufficient information must be provided to demonstrate that there is an inadequacy.
- 2. To be subject to CB-22-2015, the subject property must be in an area for which a road club was established prior to November 16, 1993. In fact, the Brandywine Road Club was included in CR-60-1993, adopted on September 14, 1993, and it was developed and in use before that date.

Comment: Pursuant to CR-9-2017, the Brandywine Road Club fee will be \$1,472 for each single-family dwelling unit, \$1,338 for each single-family attached dwelling unit, and \$2.07 per gross square foot of non-residential use, to be indexed by the appropriate cost indices to be determined by the Department of Permitting, Inspections and Enforcement (DPIE). Pursuant to CB-22-2015, an applicant's pro-rata contribution to the Brandywine Road Club fulfills transportation adequacy requirements and is therefore recommended as a condition of approval as part of this application, which shall be fulfilled over to the time of each building permit.

Transportation Planning Review

Based on the methods provided in the "Transportation Review Guidelines – 2022 Supplement", the proposed residential development will generate 55 AM and 63 PM vehicle trips. Staff finds that all critical intersections will operate at acceptable levels to serve the proposed development based on the findings and conclusions provided in the traffic analysis. The Transportation Planning Section concludes that adequate transportation facilities would exist to serve the proposed subdivision as required under Section 24-4505 and Section 24-4506 of the Prince George's County Code.

Recommendations

Based on the findings presented above, staff conclude that transportation facilities will exist to serve the proposed subdivision as required under the prior and current Subtitle 24, if the following conditions are met:

- 1. Total development within the proposed Preliminary Plan of Subdivision shall be limited to uses that generate no more than 55 AM peak-hour trips and 63 PM peak-hour vehicle trips.
- 2. Prior to approval of a building permit for each single-family attached dwelling unit, the applicant and the applicant's heirs, successors, and/or assigns shall provide a fee calculated of \$1,338 per dwelling unit multiplied by (Engineering News Record Highway Construction Cost index at time of payment) / (Engineering News Record Highway Construction Cost Index for first quarter, 1993). All fees shall be paid to Prince George's County (or its designee) and can be indexed by any appropriate cost indices determined by the Prince George's County Department of Permitting, Inspections and Enforcement (DPIE) or Department of Public Works and Transportation (DPW&T).