Statement in Support of Special Exception

Brandywine Aggregates, LLC ("Applicant") seeks special exception approval pursuant to the requirements at Anne Arundel County Code ("Code"), § 18-11-113 pertaining to "Clay and borrow pits and sand and gravel operations" for a proposed use on property located at 2882 Patuxent River Road, Davidsonville ("Property"), which Property contains approximately 83.4 acres and is more particularly described as Tax Map 54, Parcel 1. The Property is split-zoned between the RA-Rural Agricultural District ("RA") and the OS-Open Space District ("OS"). The Applicant's proposed sand and gravel operation – much like its existing operation located approximately ¼-mile from the Property at 3026 Patuxent River Road – will be conducted wholly within the RA sections of the site, as authorized at Code, § 18-4-106.

The Applicant's proposal is in compliance with all applicable requirements at Code, § 18-11-113 and § 18-16-304 (a) as illustrated below. Certain elements of the Code¹ are preempted by State law as explained in prior decisions rendered by the Administrative Hearing Officer (see Tolson & Associates, LLC, Case Number 2016-0196-S; see also Chaney Enterprises, LP, Case Numbers 2015-0245-S, 2015-0246-S, 2015-0247-S, 2015-0248-S, 2015-0249-S, 2015-0250-S, 2015-0251-S and 2015-0252-S and County Exhibit 16: January 7, 2016 memorandum from Anne Arundel County Office of Law). The information provided herein is consistent with these prior decisions.

Code, § 18-11-113

(1) All vehicular access to the site shall be provided from a collector road, an arterial road, a freeway, or a local road that serves only industrially zoned or commercially zoned property between the facility entrance and the first intersecting collector road, arterial road, or freeway in all directions.

Vehicular access to the site is proposed to be provided from Patuxent River Road. As illustrated on the map entitled "Road Functional Classifications Bill No. 12-15 Adopted May 28, 2015" (https://www.aacounty.org/sites/default/files/2023-03/Functional_Class.pdf), Patuxent River Road is a Minor Arterial road.

(2) The extraction and removal operation may not be noxious, offensive, or otherwise objectionable to surrounding land uses.

This provision is preempted by State law.

(3) All significant archaeological sites shall be identified and preserved under the supervision of the Office of Planning and Zoning.

This provision is preempted by State law.

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¹ State law preempts Code, § 18-11-113 (2), (3), (6), (8), (13) (ii) – (viii), (15), (16), (17), (19), and § 18-16-304 (a) (11).

(4) The active operation shall be surrounded by fencing at least six feet high with gates to limit access to the area.

Operations at the facility will be conducted in compliance with this provision.

(5) Space on the site shall be adequate so that trucks using the facility are not stopped or parked on a road right-of-way.

Operations at the facility will be designed and conducted in compliance with this provision.

(6) Except in a W3 District, the use of machinery in the excavation area shall be limited to that necessary to extract, screen, wash, and transport materials generated onsite and all material shall be removed from the excavation area to a processing site for any additional processing.

This provision is preempted by State law.

(7) Except in a W3 District, a permanent legible sign approved by the Office of Planning and Zoning measuring at least four feet by eight feet shall be posted and maintained along each public road abutting the property or, if the property does not abut a public road, one or more signs posted in locations that can be seen by the public. The sign or signs shall state that the property has been approved for a clay and borrow pit or sand and gravel operation, the special exception case number, the applicant's name, and the name and telephone number of the operator.

The facility's signage will be maintained in compliance with this provision.

(8) Reclamation activity for a distance of 1,000 feet from undisturbed areas may not increase the site grade above the grade of the adjacent undisturbed areas.

This provision is preempted by State law.

(9) Offsite materials brought to the site of an operation other than for construction of a berm or for reclamation shall be restricted to the processing site.

Operations at the facility will be conducted in compliance with this provision.

(10) Except in a W3 District, the hours of operation in an excavation area shall be limited to 7:00 a.m. to 5:00 p.m. Monday through Saturday.

Operations at the facility will be conducted in compliance with this provision.

Page 2 of 7 November 2023

(11) Additional rights-of-way for widening or extension of existing roads shall be dedicated and deeded, as appropriate, if requested by the Department of Public Works or the State Highway Administration.

The facility will comply with this provision.

(12) County inspectors shall be allowed to enter onto the site during normal business hours to ensure compliance with the terms of any special exception and the requirements of this section.

Operations at the facility will be conducted in compliance with this provision.

(13) The operation shall be at least 1,000 feet from any dwelling other than a dwelling located on the site of the operation that is otherwise permitted by law, except that the operation is allowed within 1,000 feet of a dwelling if:

Operations at the facility will be at least 1,000 feet from any dwelling other than a dwelling located on the site of the operation that is otherwise permitted by law.

(i) the sound level at all lot lines does not exceed an average of 55 dBA and a peak of 65 dBA;

Operations at the facility will be conducted in compliance with this provision. Berms along the Property's boundaries will ensure that sound levels are below the applicable limits at all lot lines.

(ii) the operation is totally obscured from the sight of the affected dwelling at the highest normally accessible location of the dwelling to a maximum height of 30 feet above grade but, during the times set forth in subsection (10), the operation shall be obscured to the extent practical;

This provision is preempted by State law.

(iii) berms are used for sight obstruction and noise abatement to the extent feasible and, if not feasible, an acceptable alternative is provided; the berms are constructed with processed fill, consisting of rock and similar irreducible material that does not permit the formation of voids into which overlaying soils may be washed, and topsoil intermittently layered with non-organic soil; at least 12 inches of soil covers all rock or irreducible material that is larger than eight inches; and the berms are stabilized with suitable vegetation;

This provision is preempted by State law.

(iv) the excavation does not exceed a depth of 50 feet below the existing surrounding grade with angle of repose maintained during the excavation and the site is graded or benched to ensure safety at all times;

Page 3 of 7 November 2023

This provision is preempted by State law.

(v) the excavation and any noise abatement method are located at least 300 feet from the affected dwelling and at least 100 feet from the lot line, but the distance may be reduced if a temporary easement is obtained from the affected property owner and the easement for the permitted time frame is contained in the special exception and approved by the County Office of Law;

This provision is preempted by State law.

(vi) stabilization of the excavation area is accomplished with a cover material capable of supporting long-lived vegetation;

This provision is preempted by State law.

(vii) reclamation is performed simultaneously with the excavation operation and completed within two years after the excavation operation has ceased; and

This provision is preempted by State law.

(viii) work ceases immediately for a violation of this subsection or any conditions imposed by the Administrative Hearing Officer and, if there are three violations in a 12-month period, the portion of the special exception that allows work in the 1,000-foot area shall be rescinded and all reclamation shall be completed within 12 months.

This provision is preempted by State law.

- (14) The facility may incorporate a processing site for the stockpiling and processing of material generated onsite and offsite if all of the following requirements are met.
 - (i) Except in a W3 District, the processing site shall be at least 50 acres; material generated offsite and used for processing with onsite material in any 12-month period may not exceed 45% of the material generated onsite in the same period; material generated offsite may be used only for blending with material generated onsite; the use of machinery shall be limited to that necessary in the production of finished sand and gravel products from materials allowed under this subsection; hours of operation shall be limited to 7:00 a.m. to 5:00 p.m. Monday through Saturday; the time frame for the operation of the processing site may not exceed 25 years; and a crusher or similar reduction equipment is prohibited.

The Applicant does not anticipate importing offsite material to the site.

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(ii) All stationary equipment and stockpiles shall be located at least 1,000 feet from a dwelling other than an onsite dwelling and at least 300 feet from a road other than an internal road used exclusively for onsite operations.

Stationary equipment and stockpiles will be located more than 1,000 feet from dwellings and more than 300 feet from Patuxent River Road. As such, operations at the facility will be designed and conducted in compliance with this provision.

(iii) Weight scales shall be operational at all processing sites.

Operations at the facility will be conducted in compliance with this provision.

(15) A maximum time period for operation of the facility shall be established as part of the special exception approval and may not be renewed.

This provision is preempted by State law.

(16) The site shall be cleared of litter and scattered refuse daily.

This provision is preempted by State law.

(17) There shall be a 50-foot natural buffer between the operation and nontidal wetlands.

This provision is preempted by State law.

(18) A facility located in an RA District shall be located on a road other than a scenic or historic rural road.

The facility complies with this provision. As explained in the document entitled "Scenic & Historic Roads OPZ Review Policy & Guidelines" ("Guidelines") produced by the Cultural Resources Section of the Office of Planning and Zoning, the portion of Patuxent River Road where the Property is located is not listed on the Guidelines' "Appendix D: Map Showing Rural Scenic & Historic Roads (Bill #04-06)." As such, the Guidelines direct that, for zoning purposes, the location of the requested special exception use is not restricted: the Property is zoned RA and Patuxent River Road is not a "Scenic or Historic Rural Road."

(19) Combustion ash, including bottom ash and fly ash, may not be used as fill in reclamation of a clay and borrow pit or a sand and gravel operation.

This provision is preempted by State law.

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Code, § 18-16-304 (a)

(1) The use will not be detrimental to the public health, safety, or welfare;

Operations at the facility will be designed and conducted in compliance with this provision. All applicable noise restrictions and setbacks will be met. The proposed use has also been designed to protect the Property's most sensitive natural resources. While the use is exempt from processing under the County's forest conservation provisions per Code, § 17-6-301 (b) (8) and Md. Environment Code Ann. §§ 15-801 et seq., forest cover that is removed in connection with the sand and gravel operation will be replanted at reclamation. The Property's OS lands are generally located on the southern edges of the parcel along an unnamed Patuxent River tributary. The operations proposed on the site are designed to avoid disturbances to the OS lands, to provide a 50' buffer to nontidal wetlands, and to provide a 100' stream buffer.

(2) The location, nature, and height of each building, wall, and fence, the nature and extent of landscaping on the site, and the location, size, nature, and intensity of each phase of the use and its access roads will be compatible with the appropriate and orderly development of the district in which it is located;

Operations at the facility will be designed and conducted in compliance with this provision. The scale house is planned to be minimally impactful on the surrounding neighborhood, and all landscaping will provide appropriate screening.

(3) Operations related to the use will be no more objectionable with regard to noise, fumes, vibration, or light to nearby properties than operations in other uses allowed under this article;

Operations at the facility will be designed and conducted in compliance with this provision. Sound levels will be below the applicable limits at all lot lines. Light impacts on surrounding properties will also be minimal given the limited hours of operation that will be proposed at the facility, and the topography and intervening distances to nearby uses. Other RA uses that typically have operations that would be more objectionable than the proposed use would include airports and airfields, heliports, farm alcohol production facility, and volunteer fire stations.

(4) The use at the location proposed will not have any adverse effects above and beyond those inherently associated with the use irrespective of its location within the zoning district;

Operations at the facility will be designed and conducted in compliance with this provision. This is a rural and very low-density area. The use is proposed on a large parcel that is adjacent to woodlands on the north and south with floodplain and a stream on the west relating to the Patuxent River. The impacts here will be less than in a more developed area in the RA zone.

(5) The proposed use will not conflict with an existing or programmed public facility, public service, school, or road;

Page 6 of 7 November 2023

Operations at the facility will be designed and conducted in compliance with this provision. Traffic and vehicular impacts on local roads, facilities, services, and schools will be minimal. A low volume of vehicle trips will be generated, key intersections will continue to operate at satisfactory levels of service, intersection sight distance at the site access point will be unobstructed, such that roads and traffic will operate safely and harmoniously with the surrounding neighborhood.

(6) The proposed use has the written recommendations and comments of the Health Department and the Office of Planning and Zoning;

We believe the application will demonstrate compliance with the standards and anticipate a recommendation of approval from the Health Department and the Office of Planning and Zoning.

(7) The proposed use is consistent with the County General Development Plan;

The facility will be designed to be consistent with Plan2040 and with applicable provisions associated with the Rural and Agricultural Development Policy Area and Priority Preservation Areas.

(8) The applicant has presented sufficient evidence of public need for the use;

The Applicant will provide information specific as to how the proposed use will meet the public need based on its experience in the industry and the continuing need for concrete products created from this finite resource. Economic and fiscal impact data indicate there is a public need for the use. Research undertaken by the Applicant suggests an overall positive fiscal impact on Anne Arundel County including, among other factors, an influx of funds into the local economy, more competitive pricing for sand and gravel products to consumers as a result of local production, and new year-round full-time jobs.

(9) The applicant has presented sufficient evidence that the use will meet and be able to maintain adherence to the criteria for the specific use;

See above.

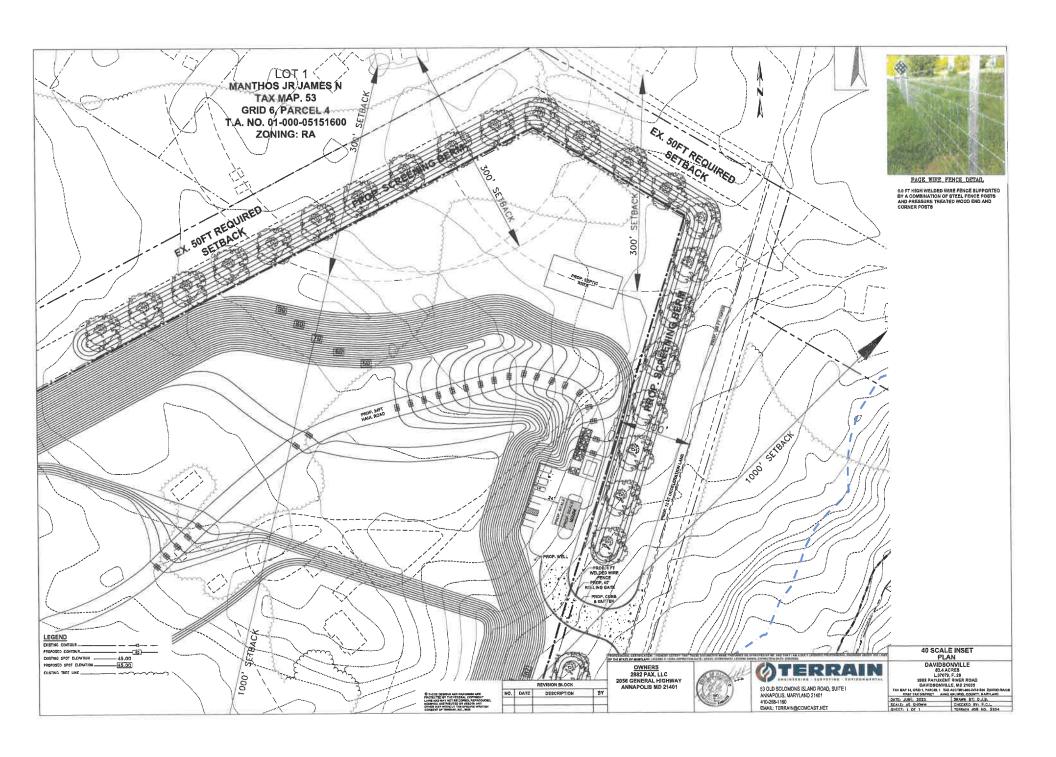
(10) The application will conform to the critical area criteria for sites located in the critical area; and

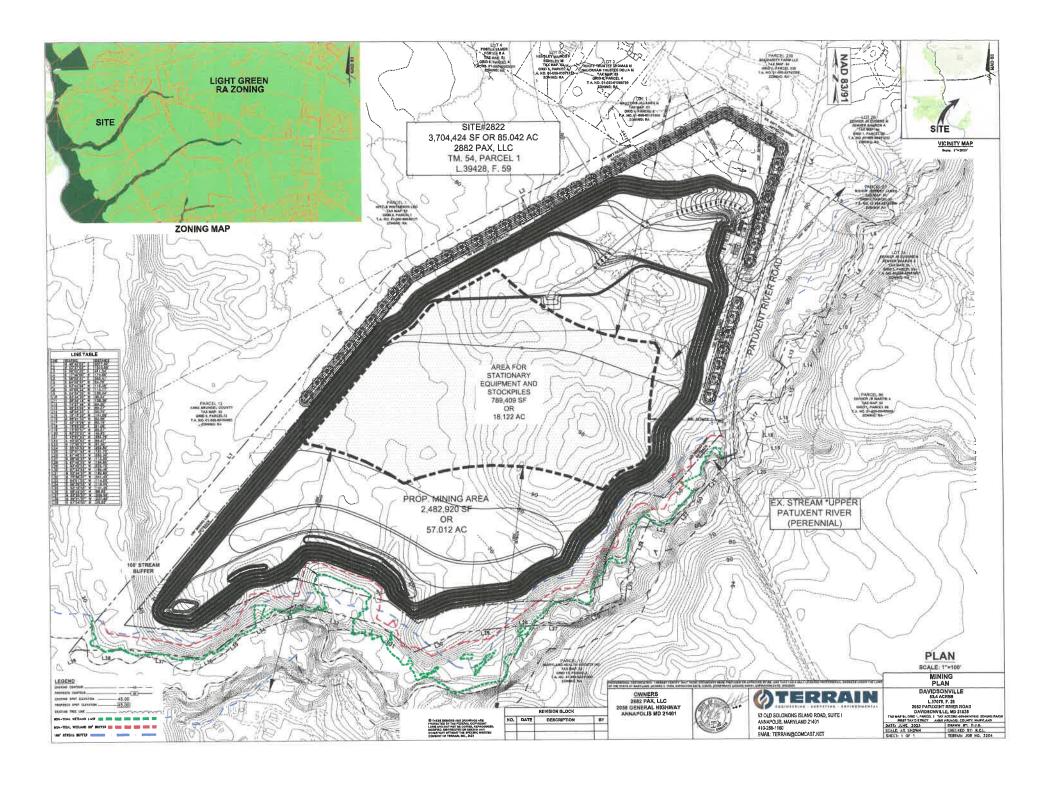
Not applicable.

(11) The administrative site plan demonstrates the applicant's ability to comply with the requirements of the Landscape Manual.

This provision is preempted by State law.

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OFFICE OF PLANNING AND ZONING

CONFIRMATION OF PRE-FILE MEETING

	DATE OF MEETING _	10.2.	2023
	P&Z STAFF	Sumner Handy, Courtney	Wilson, Jessica Levy
	Pre-File Record Numl	per2	023-0032-P
APPLICANT/REPRESENTATIVEAlan Hyatt	EMAIL	ahyatt@hwlaw.co	om
SITE LOCATION _2882 Patuxent River Road, Davidsonville	LOT SIZE	83.4 acres ZONING	RA, OS
CA DESIGNATIONBMA or BUFFER	_ APPLICATION TYPE	special exception	
The applicant (Brandywine Aggregates, LLC, represer exception application for a clay and borrow pit and s Anne Arundel County Code.			

COMMENTS

The Regional Team in the Development Division has no comment. Given the several preemptions of County law by State law, the Regional Team in the Development Division does not review site development plans for this use.

The Long Range Planning Team noted that Plan2040 places the site in the Rural and Agricultural Policy Area and the Rural Planned Land Use category. The proposal is generally consistent with the goals, policies, and strategies of Plan2040. The Team also noted that the proposal is consistent with the 2022 Water and Sewer Master Plan. Complete comments from the LRP Team are appended in full to this document.

The Zoning Division notes that the proposal must meet the specific criteria for the use as laid out in Section 18-11-113 of the Code, and the general special exception criteria as laid out in Section 18-16-304 of the Code. The Zoning Division concurs with the designation of which criteria are preempted by State law, as laid out in the letter of explanation provided with this request for pre-file comments. The Zoning Division notes that it does not appear that any variances are required for the application.

INFORMATION FOR THE APPLICANT

Section 18-16-201 (b) Pre-filing meeting required. Before filing an application for a variance, special exception, or to change a zoning district, to change or remove a critical area classification, or for a variance in the critical area or bog protection area, an applicant shall meet with the Office of Planning and Zoning to review a pre-file concept plan or an administrative site plan. For single lot properties, the owner shall prepare a simple site plan as a basis for determining what can be done under the provisions of this Code to avoid the need for a variance.

*** A preliminary plan checklist is required for development impacting environmentally sensitive areas and for all new single-family dwellings. A stormwater management plan that satisfies the requirements of the County Procedures Manual is required for development impacting environmentally sensitive areas OR disturbing 5,000 square feet or more. State mandates require a developer of land provide SWM to control new development runoff from the start of the development process.

Section 18-16-301 (c) Burden of Proof. The applicant has the burden of proof, including the burden of going forward with the production of evidence and the burden of persuasion, on all questions of fact. The burden of persuasion is by a preponderance of the evidence.

A variance to the requirements of the County's Critical Area Program may only be granted if the Administrative Hearing Officer makes affirmative findings that the applicant has addressed all the requirements outlined in Article 18-16-305. Comments made on this form are intended to provide guidance and are not intended to represent support or approval of the variance request.



Jenny B. Jarkowski Planning and Zoning Officer

MEMORANDUM

TO:

Zoning Division

FROM:

Jessica Levy, Long Range Planner

THROUGH: Cindy Carrier, Planning Administrator, Long Range Planning

SUBJECT:

Long Range Planning Comments

DATE:

September 19, 2023

Name of Project:

Brandywine Aggregates, LLC

Case#:

2023-0032-P

Location:

2882 Patuxent River Rd, Davidsonville

Tax Map 54, Parcel 0001

Region Planning Area: Region 8

Community:

Davidsonville

Summary:

The applicant requests a Special Exception to allow a sand and gravel operation.

The approximately 83.4-acre site is located in the Plan2040 Rural and Agricultural Development Policy Area and the Rural Planned Land Use category. Surrounding properties are in the Rural Planned Land Use category. Zoning for the site is primarily RA with OS on the south west portion of the property. Surrounding properties are zoned RA and OS. The site is not located within the Priority Funding Area. Most of the property is unprotected within the Green Infrastructure Network.

Findings:

Plan 2040 General Development Plan: Plan 2040 does not have recommendations that are specific to this site and the proposal is generally consistent with the goals, policies and strategies of Plan2040. This proposal is within Region Planning Area 8. The Region Plan process for Region 8 is anticipated to begin in January, 2024 and completed in the spring of 2026. No applications were submitted during the 2011 Comprehensive Rezoning process.

2017 Water and Sewer Master Plan: The site is in the No Public Service category in the Rural Sewer Service Area and the No Public Service category in the Rural Water Pressure Zone. The proposal is consistent with the 2022 Water and Sewer Master Plan.

> "Recycled Paper" www.aacountv.org

TRAFFIC CONCEPTS, INC.

Traffic Impact Studies • Feasibility • Traffic Signal Design • Traffic Counts • Expert Testimony

March 13, 2023

Mr. Daniel S. Jones, Esquire Jones of Annapolis 2056 Generals Highway Annapolis, Maryland 21401

REF: Proposed Sand & Gravel Operation

2882 Patuxent River Road Davidsonville, Maryland 21035

Dear Mr. Jones,

As requested, Traffic Concepts, Inc. a traffic engineering consultant firm, has evaluated the truck traffic associated with a proposed sand and gravel mine to be located at 2882 Patuxent River Road, Davidsonville, MD. As outlined in a recent traffic impact study conducted for the proposed project, 75% of the truck traffic associated with this project is anticipated to travel northward towards the Rossback Road/MD 424 intersection. Likewise, 25% of the truck traffic is anticipated to travel southwards towards the Patuxent River Road/MD 214 intersection.

The proposed sand & gravel site is currently a private residence/agricultural property with access derived directly from the southbound side of Patuxent River Road. Patuxent River Road, a county owned/maintained 2-lane roadway (10-11' lanes in each direction), is deemed as a "scenic and historic" roadway by Anne Arundel County/Office of Planning & Zoning, with a posted speed limit of 30 mph, limited shoulders and 2,840 ADT (Average Daily Trips). Despite the roadways' occasional serpentine alignment and having limited shoulder improvements, both Patuxent River Road and Rossback Road are relatively flat, with no presence of significant drop-off from the outside limits of the roadway surface and beyond. The section in question which stretches between MD 214 and MD 424 (via Rossback Road) is striped with white edge lines and a solid yellow center-line which prohibits passing in both directions. During a recent field visit it was determined that both Patuxent River Road and Rossback Road are in excellent condition with no signs of pavement deterioration.

MD 424 is a state owned/maintained 45 mph dual highway featuring two lanes in either direction separated by a landscaped median in the vicinity of the unsignalized Rossback Road intersection. Left turns from eastbound Rossback Road onto MD 424 are permitted with sufficient sight distance in both directions and adequate shoulder improvements to accommodate merging with southbound MD 424 traffic.

Daniel S. Jones, Esquire March 13, 2023 Page 2 of 3

MD 214 is a state owned/maintained two-lane roadway with a posted speed limit of 40 mph and adequate shoulder improvements along both sides throughout. The MD 214/Patuxent River Road intersection is signalized and the roadway is in excellent condition, featuring solid white edge lines and a double yellow center line.

Intersection Sight Distance

The proposed sand and gravel mine is to be located along the west side of Patuxent River Road approximately one quarter mile south of the Governor Bridge intersection. Dump trucks transporting sand/gravel will exit the proposed site toward MD 424 to the north and MD 214 to the south. The existing driveway slated for access offers unobstructed sight distance in excess of 500 feet in both directions along Patuxent River Road.

The American Association of State Highway Transportation Officials (AASHTO) sight distance standard guidelines establish that a roadway with a posted speed limit of 30 mph/design speed of 40 mph provide a minimum of 305 feet of Stopping Sight Distance/445 feet of Intersection Sight Distance. The existing site access exceeds both of these standard requirements along Patuxent River Road in both directions.

Plant Operation

It is anticipated that the proposed sand and gravel mine will conduct normal operations on weekdays (Monday thru Friday) between the hours of 7:00 AM and 4:00 PM. The operation is projected to generate 200 trips per day, with approximately 20 of these trips (using 10 trucks) during the peak hour of the adjacent roadway. Parking and staging of trucks will be provided onsite. The site access to Patuxent River Road will be controlled with a STOP sign.

Conclusions

There is inherent impact to area roadways with any change to the surrounding land use; therefore, this analysis addresses the impact of this operation's access to Patuxent River Road Road and the remainder of the roadway network previously discussed. The question is whether the impact at this location is greater than if this proposed use were located on a similarly zoned property elsewhere in the county. The primary access for this site is Patuxent River Road with the ultimate access being to MD 424 and MD 214 respectively, both of which are state owned/maintained roadways designed to handle trucks of the type generated by the proposed use.

The general area contours are flat and although there are limited shoulders along both Patuxent River Road and Rossback Road, the volume of daily traffic along these roadways is minor. We conclude, that with the proximity of this site access to the ultimate connection with the state highway system, the existence of adequate access sight lines for ingress and egress, and the low volume of existing traffic along the local roadways, the sand and gravel mine will operate safely and in harmony with the immediate surrounding neighborhood.

Daniel S. Jones, Esquire March 13, 2023 Page 3 of 3

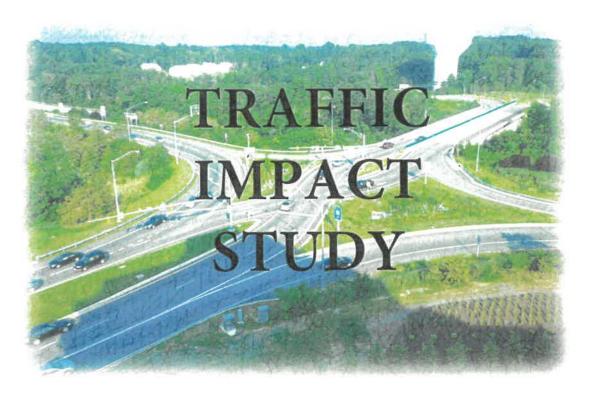
We also conclude the use will not pose any unusual danger to the public or burden to the roadway network and is acceptable from a traffic impact perspective for the duration of the mining operations. This usage is site specific and the use of the existing site access will have minor impact to the surrounding local roadways than already exists. Based on the levels of proposed traffic using the site, the operation of the sand and gravel mine on this site will not overburden the existing roads. It is our assessment that the proposed sand and gravel operation should be granted from a traffic impact standpoint.

Sincerely,

TRAFFIC CONCEPTS, INC.

John . In

JMayer@traffic-concepts.com



SAND AND GRAVEL MINE OPERATION

2882 PATUXENT RIVER ROAD ANNE ARUNDEL COUNTY, MARYLAND

FEBRUARY, 2023

PREPARED FOR: BRANDYWINE AGGREGATES, LLC

PREPARED BY: TRAFFIC CONCEPTS, INC.

> **7525 CONNELLEY DRIVE SUITE B** HANOVER, MARYLAND 21076 410-760-2911

www.traffic-concepts.com

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INTRODUCTION

This traffic impact study was conducted for a proposed sand and gravel mine operation to be located at 2882 Patuxent River Road in Davidsonville, Maryland.

Project Description

The site is located along the west side of Patuxent River Road, south of Governor Bridge Road. The site will create a full movement access to Patuxent River Road. The property is proposed to generate approximately 200 truckloads per day.

Scope of Services

The study was developed in accordance with the Anne Arundel County Adequate Public Facilities Ordinance (APFO). The scope of services for this study is contained in a traffic scoping letter that was approved by the Anne Arundel County Office of Planning and Zoning and is dated February 7, 2023. The scoping letter is included in Appendix III. The key intersections listed below were analyzed during the weekday AM (7:00 AM to 9:00 AM) peak hours and the weekday PM (4:00 PM to 6:00 PM) peak hours. All road links are deemed "Scenic & Historic", therefore link analyses are not required.

Key Intersections

MD	424	@	Patuxent	River	Road/Rossback Road
MD	214	@	Patuxent	River	Road
Pate	uxen	t R	iver Road	@ Si	te Access

The key intersections and the location of the site are shown on Exhibit 1 and the lane use configurations are provided on Exhibit 2.

Study Methodology

The key intersections were analyzed with the Critical Lane Volume (CLV) methodology. The new site generated vehicle trips were determined with the *Institute of Transportation Engineers, Trip Generation Manual 11th Edition.* In addition, any signalized intersection with a critical lane volume greater than 1300 has been analyzed utilizing the Highway Capacity Manual.

Study Format

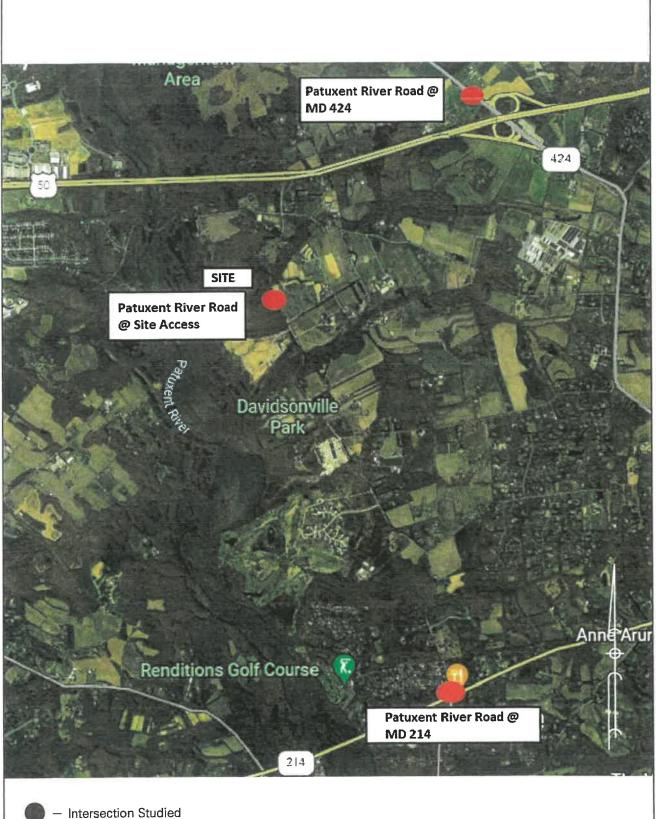
The study is structured to include analyses of the key intersections under existing, background and future traffic conditions.

The existing traffic condition is determined with the existing peak hour intersection turning movements and creates the baseline intersection levels of service.

The background traffic condition analysis of the key intersections includes peak hour trips generated by the nearby background developments. The total background trips are added to the existing traffic volumes to create the total background traffic volumes.

The future traffic condition determines the site generated peak hour trips. The total background traffic volumes are added to the site trips to create the total future traffic volumes. The total future traffic condition is described with the following formula:

Total Future Traffic = (Existing Traffic + Approved Development Traffic + Site Generated Traffic)





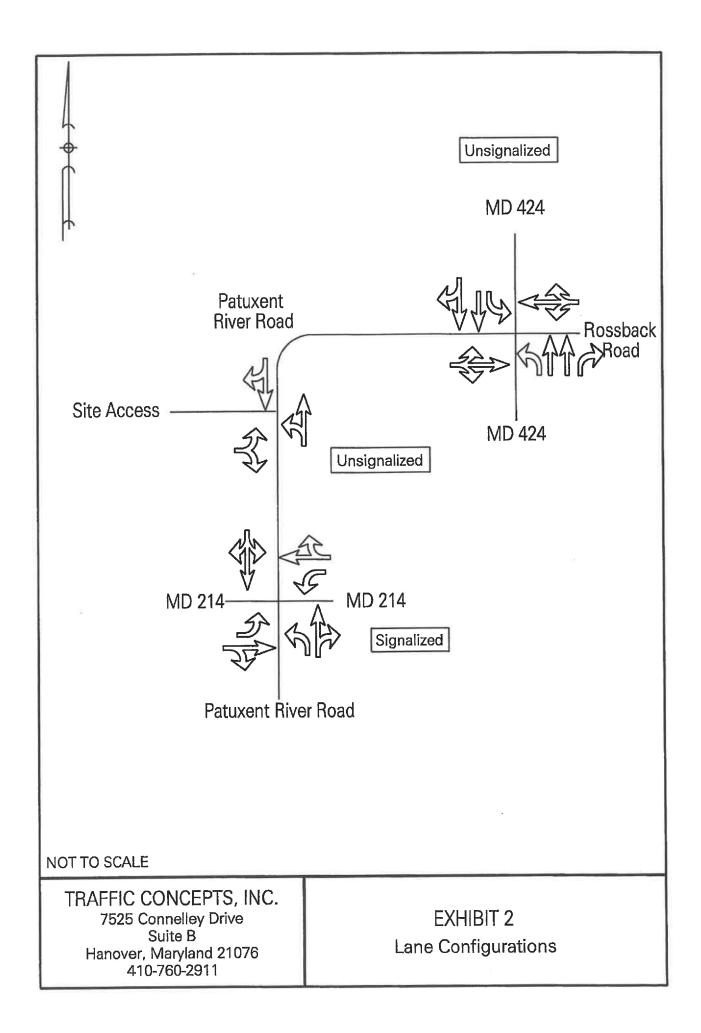
TRAFFIC CONCEPTS, INC.

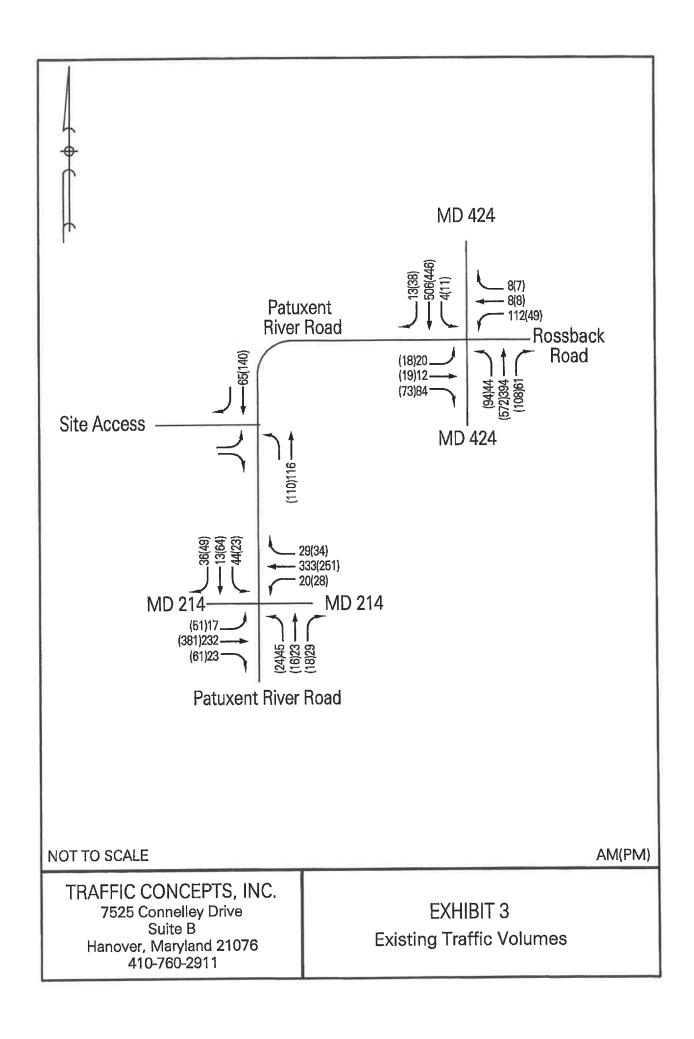
7525 Connelley Drive Suite B Hanover, Maryland 21076 410-760-2911

EXHIBIT 1 Site Location

EXISTING CONDITION

Peak hour turning movement counts were performed at the key intersections. Since these intersections have been counted after September 9, 2021, the traffic counts are allowed per Green Notice OPZ-21-06. The counts have been verified for accuracy based on review of historical data. Please note that the traffic volumes may not balance between intersections due to mid-block generators as well as possible differences in peak hours and/or dates the counts were performed. The existing base-line peak hour volumes are displayed on Exhibit 3. Details of the traffic count data, intersection condition diagrams and a copy of the Anne Arundel County Public Schools website can be found in Appendix II of this study.





BACKGROUND CONDITION

The background condition analysis evaluates the key intersections with vehicle trips generated by nearby background developments. As indicated in the scoping letter (a copy can be found in Appendix III), there are no such developments.

FUTURE CONDITION

The future traffic condition determines the vehicle trips generated by the proposed project. The trip generated rates were based on anticipated site traffic of 200 truckloads distributed evenly between the hours of 7 am and 4 pm.

Trip Generation

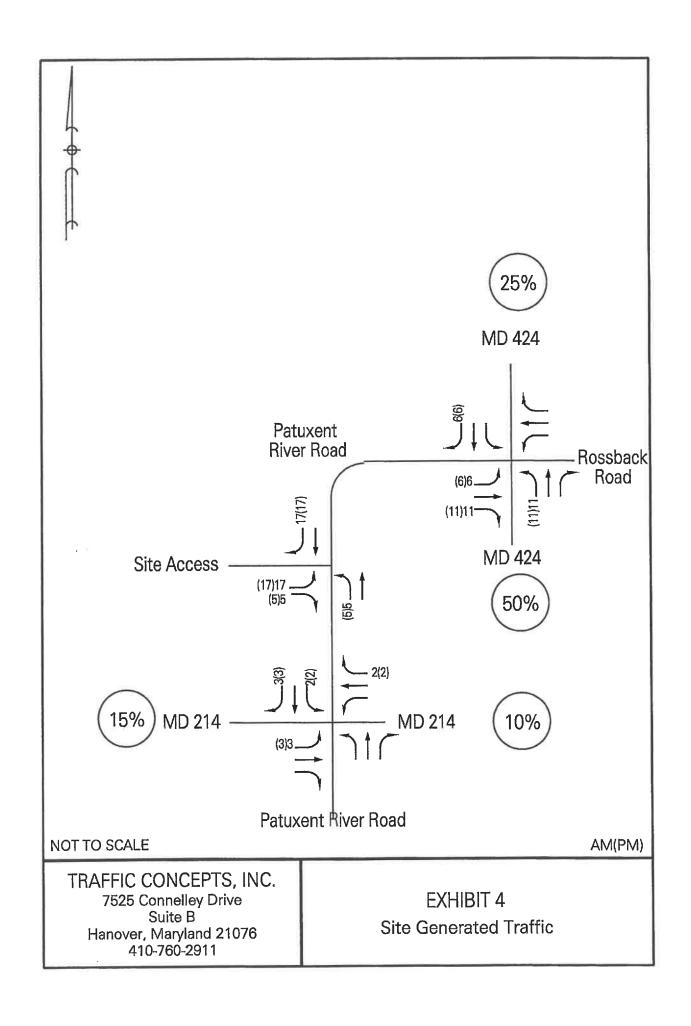
The site generated vehicle trips are shown below. The distribution of the new trips is shown on Exhibit 4.

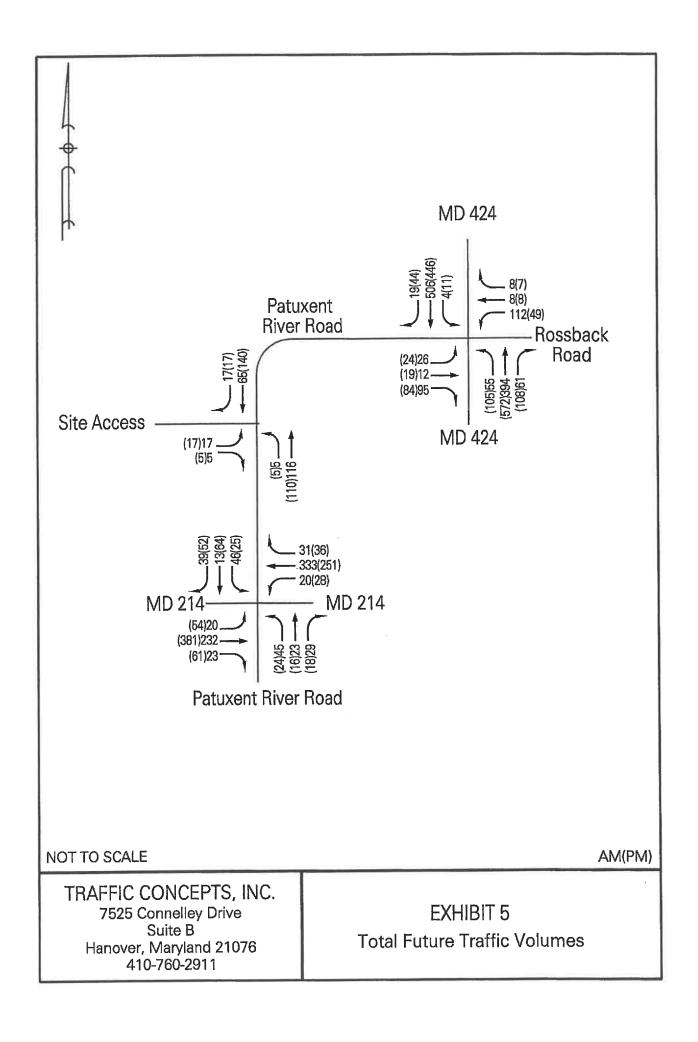
ITE Trip Generation

		AM	PM	
	<u>IN</u>	OUT	<u>IN</u>	OUT
400 trips	22	22	22 *	22 *

^{*} The truckloads should be finished by 4 PM but in order to create a worst-case scenario we have assumed the trucks will still be operating during the PM peak.

The total future traffic volumes shown on Exhibit 5 include the total background traffic volumes and the site trips.





INTERSECTION CAPACITY ANALYSIS

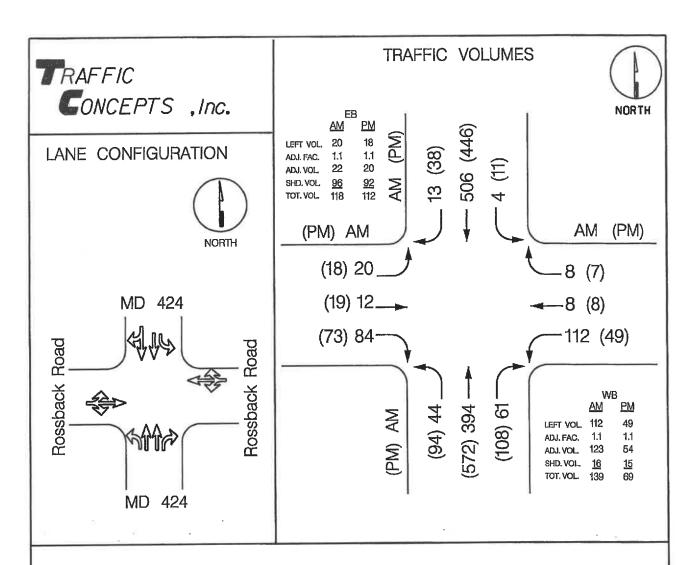
The key intersections were analyzed during the existing, background and future traffic conditions using the Critical Lane Volume (CLV) method with the results listed on the following chart and the detailed calculations are included in Appendix I.

CRITICAL LANE VOLUME ANALYSIS AN	/I PEAK HOUR	
KEY INTERSECTIONS	EXISTING Delay / LOS	FUTURE Delay / LOS
MD 424 @ Patuxent River Road/Rossback Road	559 / A	592 / A
MD 214 @ Patuxent River Road	521 / A	532 / C
Patuxent River Road @ Site Access		144 / A

CRITICAL LANE VOLUME ANALYSIS – PN	I PEAK HOUR	
KEY INTERSECTIONS	EXISTING	FUTURE
KET INTERSECTIONS	Delay / LOS	Delay / LOS
MD 424 @ Patuxent River Road/Rossback Road	521 / A	552 / A
MD 214 @ Patuxent River Road	632 / A	637 / C
Patuxent River Road @ Site Access		184 / A

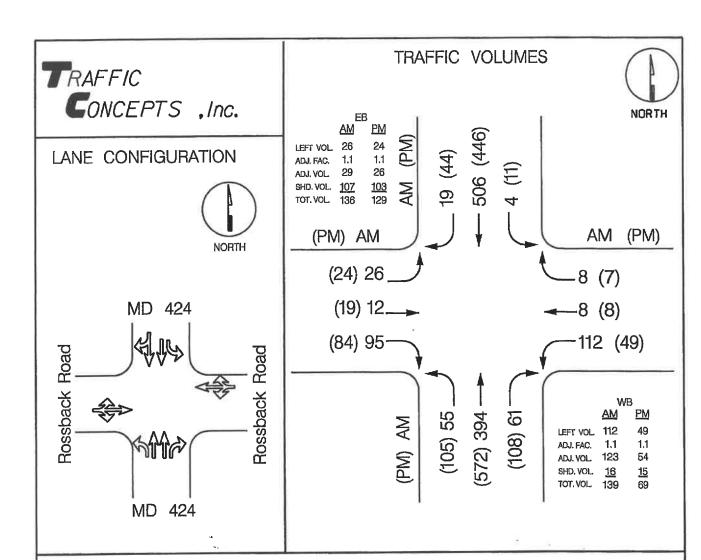
CONCLUSIONS

The analysis has shown that the key intersections will continue to operate at satisfactory levels of service under future conditions. Therefore, we respectfully request that your office approve this development from a traffic impact standpoint.



		TOTA	L VOLUME	* LUF	+	OPPOSING	LEFTS *	LUF =	=	CRITICAL LANE VOLUME	LEVEL OF SERVICE
	NB	394	*	.55	+	4	*	1	=	221	
	SB	(506 +	13) *	.55	+	44	*	1	=	329*	
AM	EB	118	*	1	+	112	*	1		230*	Α
	WB	139	*	1	+	20	*	1	=	159	559
	NB	572	*	.55	+	11	*	1	=	326	
	SB	(446 +	38) *	.55	+	94	*	1	_	360*	
PM	EB	112	*	1	+	49	*	1	=	161*	Α
	WB	69	*	1	+	18	*	1	=	87	521
1											

Prepared By.C. ATKINSON Condition: EXISTING

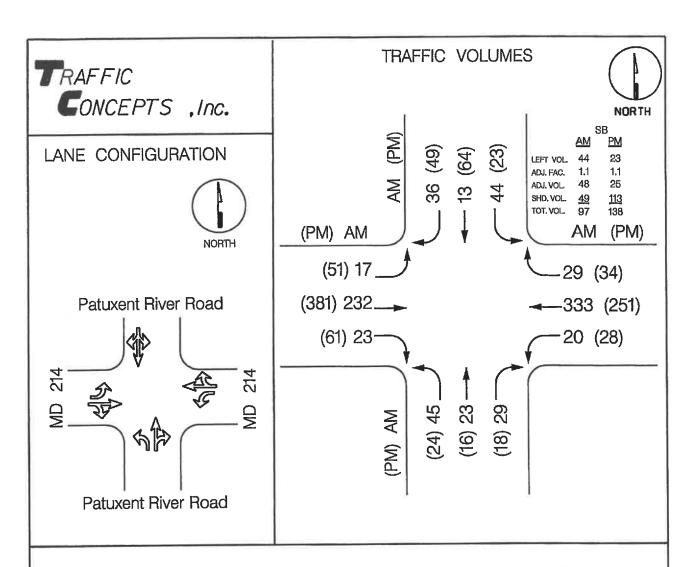


1												
			TOTAL	VOLUME	* LUF	+	OPPOSING	LEFTS *	· LUF =	<u></u>	CRITICAL LANE VOLUME	LEVEL OF SERVICE
	NB		394	*	.55	+	4	*	1	=	221	
	SB	(506	+	19) *	.55	+	55	*	1	=	344*	
AM	ЕВ		136	*	1	+	112	*	1	=	248*	Α
	WB		139	*	1	+	26	*	1	=	165	592
	NB		572	*	.55	+	11	*	1	_	326	
	SB	(446	+	44) *	.55	+	105	*	1	=	374*	
PM	EB		129	*	1	+	49	*	1	<u></u>	178*	А
	WB		69	*	1	+	24	*	1		93	552
												-

Prepared ByC. ATKINSON

_ Condition: _

EXISTING

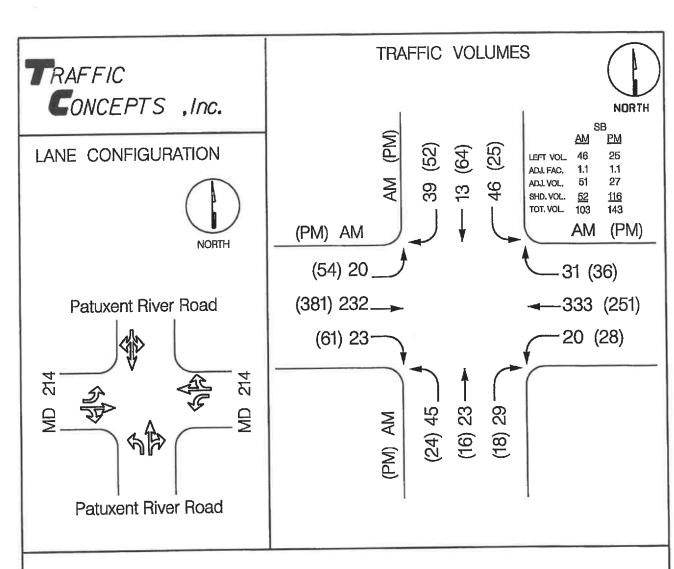


			TOTAL	. VOLUN	4E * LU	F +	OPPOSING	G LEFTS	* LUF	=	CRITICAL LANE VOLUME	LEVEL OF SERVICE
	NB	(23	+	29) 3	* 1	+	44	*	1	=	96	
	SB		97	3	k 1	+	45	*	1	=	142*	
AM	EB	(232	+	23) :	_* 1	+	20	*	1	=	275	Α
	WB	(333	+	29) :	_* 1	+	17	*	1	=	379*	521
	NB	(16	+	18)	* 1	+	23	*	1	=	57	
	SB		138	•	* 1	+	24	*	1	=	162*	
PM	EB	(381	+	61) :	* 1	+	28	*	1	=	470*	Α
	WB	(251	+	34)	* 1	+	51	*	1	=	336	632

Prepared ByC. ATKINSON

__ Condition: _

EXISTING



			TOTAL	. VOLUME	* LUF	+	OPPOSING	LEFTS '	LUF =	=	CRITICAL LANE VOLUME	LEVEL OF SERVICE
	NB	(23	+	29) *	1	+	46	*	1	=	98	
	SB	_	103	*	1	+	45	*	1	=	148*	
AM	EB	(232	+	23) *	1	+	20	*	1	=	275	Α
	WB	(333	+	31) *	1	+	20	*	1	=	384*	532
	NB	(16	+	18) *	1	+	25	*	1	=	59	
	SB		143	*	· 1	+	24	*	1	=	167*	
PM	EB	(381	+	61) *	1	+	28	*	1	=	470*	Α
	WB	(251	+	36) *	1	+	54	*	1	5700	341	637

Prepared ByC. ATKINSON Condition: FUTURE



TRAFFIC VOLUMES



LANE CONFIGURATION



(-1)

Patuxent River Road

Patuxent River Road

(MA) AM (PM) (PM) AM (PM) AM (PM) AM (PM) AM (PM) AM (PM) AM (PM) ADJ. FAC. 1.1 1.1 6 110 10 101. Vol. 116 110 110 110. Vol. 1122 116

			TOTAL	. VOLU	JME	* LUF	+	OPPOSING	LEFTS	* LUF	=	CRITICAL LANE VOLUME	LEVEL OF SERVICE
	NB		122		*	1						122*	
	SB	(65	+	17)	*	1	+	5	*	1	=	87	
AM	EB	(17	+	5)	*	1				1	=	22*	A
	WB												144
	NB		116		*	1					=	116	
	SB	(140	+	17)	*	1	+	5	*	1	=	162*	
PM	EB	(17	+	5)	*	1						22*	Α
	WB											_	184

CRITICAL LANE ANALYSIS

Prepared ByC. ATKINSON

_ Condition: _____

FUTURE

PEAK HOUR TURNING MOVEMENT COUNT

INTERSECTION: MD 214 @ PATUXENT RIVER ROAD

COUNTY: ANNE ARUNDEL

COUNT BY: CAMERA

DATE: JANUARY 12, 2023

WEATHER: OVERCAST \ RAIN

DAY: THURSDAY

_											CAM		
	PATUX	ENT RIV	/ER RD	PATUX				MD 214			MD 214		
	NOF	RTHBOL			JTHBOU			STBOU			STBOU		
TIME	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	TOTAL
AM							_	٥٣			60		407
7:00-7:15	8	4	6	2	1	6	5	35	7	6	85	2	137 182
7:15-7:30	13	5	6	3	5	8	1	44	3	5	84	3	208
7:30-7:45	9	9	6	10	4	9	4	62	10	7	85	13	250
7:45-8:00	11	5	8	14	4	13	8	72		4	68	3	178
8:00-8:15	9	8		12	3	8	2	53	4	4	96	10	208
8:15-8:30	16	1	11	8	2	6	3	45			87		
8:30-8:45	7	5	5	10	3	8	3	44		5	48	3	186 158
8:45-9:00	7	3	8	10	3	11	5	52	4	3	40	4	100
PEAK HR 7:30-8:30 TOTALS	45	23	29	44	13	36	17	232	23	20	333	29	PHF 0.84
PM 4:00-4:15	8	8	5	8	12	12	5	78		7		8	233
4:15-4:30	11	7	3	4	23	12	19	99		7		12	27
4:30-4:45	2	3	4	6	16	12	11	85		4			224
4:45-5:00	3	5	5	4	18	11	7	95		14			268
5:00-5:15	8	- 1	6	9	7	14	14	102		3			23
5:15-5:30	5	2	4	10	15	4	_		19	3		7	24
5:30-5:45	9	4	3	5	10	9	7	83	7	5			216
5:45-6:00	3	2	4	6	9	5	9	82	10	4	45	8	18
PEAK HR 4:15-5:15 TOTALS	24	16	18	23	64	49	51	381	61	28	251	34	PHF 0.92

TRAFFIC CONCEPTS, INC. 7525 CONNELLEY DRIVE, SUITE B HANOVER, MARYLAND 21076 410-760-2911 E-MAIL TRAFFIC@TRAFFIC-CONCEPTS.COM



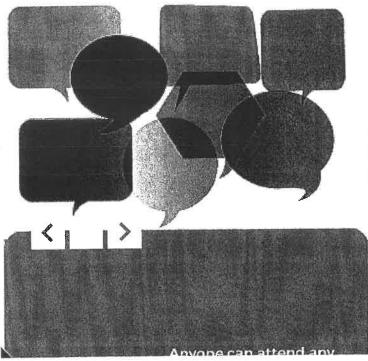
All schools open and operating on a normal schedule

Delay notices are posted as soon as they hecome available.

Select Language Y
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ELEVATING ALL STUDENTS...ELIMINATING ALL GAPS



What would you say that AACPS does well and what would you like to see us continue to do?

What would you like to see AACPS do better or eliminate altogether?

What new things would you like to see in AACPS?

Upcoming Dates

January 3: Crofton High School January 4: Tyler Heights Elementary (Spanish; begins at 5:30 p.m.)

January 5: Severna Park High

January 9: South River High

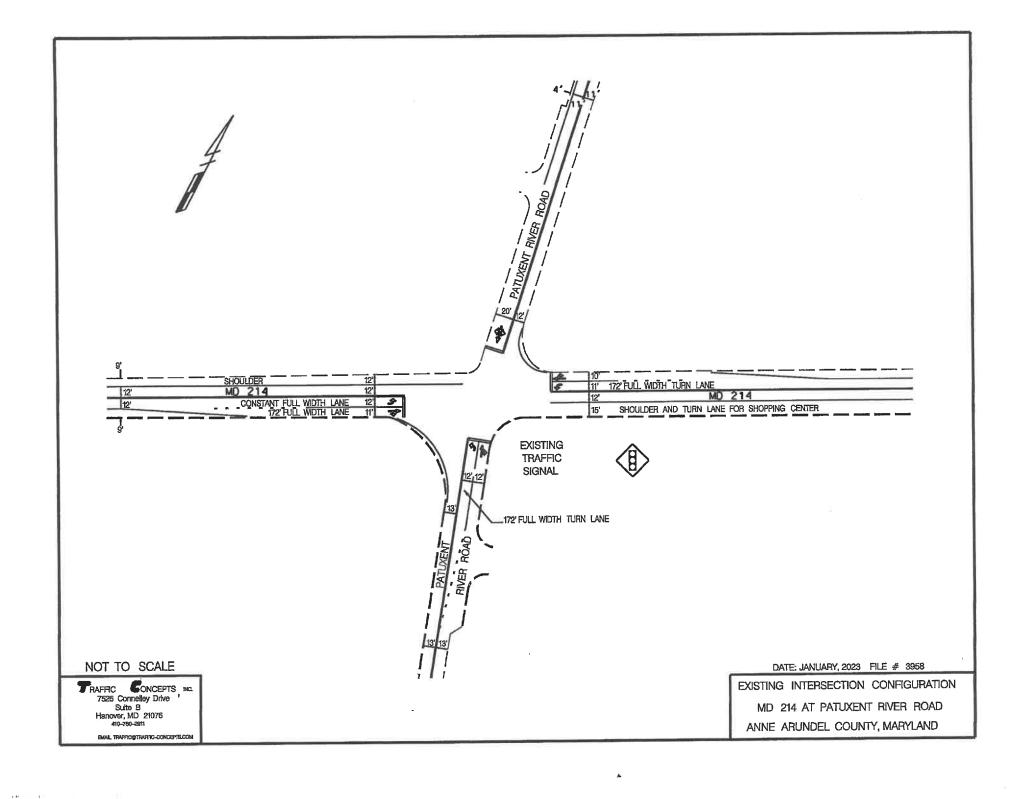
January 10: Southern High

January 11: Arundel High

January 19: Brock Bridge Elementary
(Spanish: begins at 6:00 p.m.)

DR. BEDELL'S LISTENING & LEARNING TOUR

Sessions begin @ 6 p.m. (Tyler Heights begins at 5:30 p.m.) Read additional details here



PEAK HOUR TURNING MOVEMENT COUNT

INTERSECTION: MD 424 @ ROSSBACK ROAD

COUNTY: ANNE ARUNDEL

COUNT BY: CAMERA

DATE: JANUARY 12, 2023

WEATHER: OVERCAST / RAIN

DAY: THURSDAY

CAM

Ī		MD 424		MD 424			ROSSBACK ROAD			ROSSBACK ROAD			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
TIME	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	TOTAL
AM													
7:00-7:15	10	86	26	1	87	2	4	0	14	27	2	1	260
7:15-7:30	18	103	11	0	97	3	6	0	15	29	5	3	290
7:30-7:45	13	101	17	2	135		0	1	27	33	3	1	335
7:45-8:00	7	125	14	2	132	3	7	5		33	1	3	351
8:00-8:15	12	86	15		112	4	6	3		20	1	2	284
8:15-8:30	12	82	15		127	4	7	3		26	3	2	296
8:30-8:45	13	113	12	0	118		2	0		28		1	314
8:45-9:00	12	85	10	1	120	3	3	3	14	18	2	0	271
PEAK HR 7:30-8:30 TOTALS	44	394	61	4	506	13	20	12	84	112	8	8	PHF 0.90
PM 4:00-4:15	22	147	18	1	113	11	8	6	19	12	0	1	358
4:15-4:30	26	136	33		119	13	5	6	26	16	2	1	387
4:30-4:45	24	155			109	8		5	20	10	5	4	374
4:45-5:00	22	134	28		105	6	3			11	1	1	324
5:00-5:15	19	116	25	1	118	13	5	3	11	13		2	330
5:15-5:30	20	131	22	1	120	9	5	2	10				338
5:30-5:45	29	116	29	0	124	5	7					1	336
5:45-6:00	18	111			89	4	4	2	5	12	2	0	266
PEAK HR 4:00-5:00 TOTALS	94	572	108	11	446	38	18	19	73	49	8	7	PHF 0.93

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HANOVER, MARYLAND 21076
410-760-2911 FAX 410-760-2915
E-MAIL TRAFFIC@TRAFFIC-CONCEPTS.COM

SCHOOLS TODAY 01/12/2023 All schools open and operating on a normal schedule
Delay notices are posted as soon as they become available.

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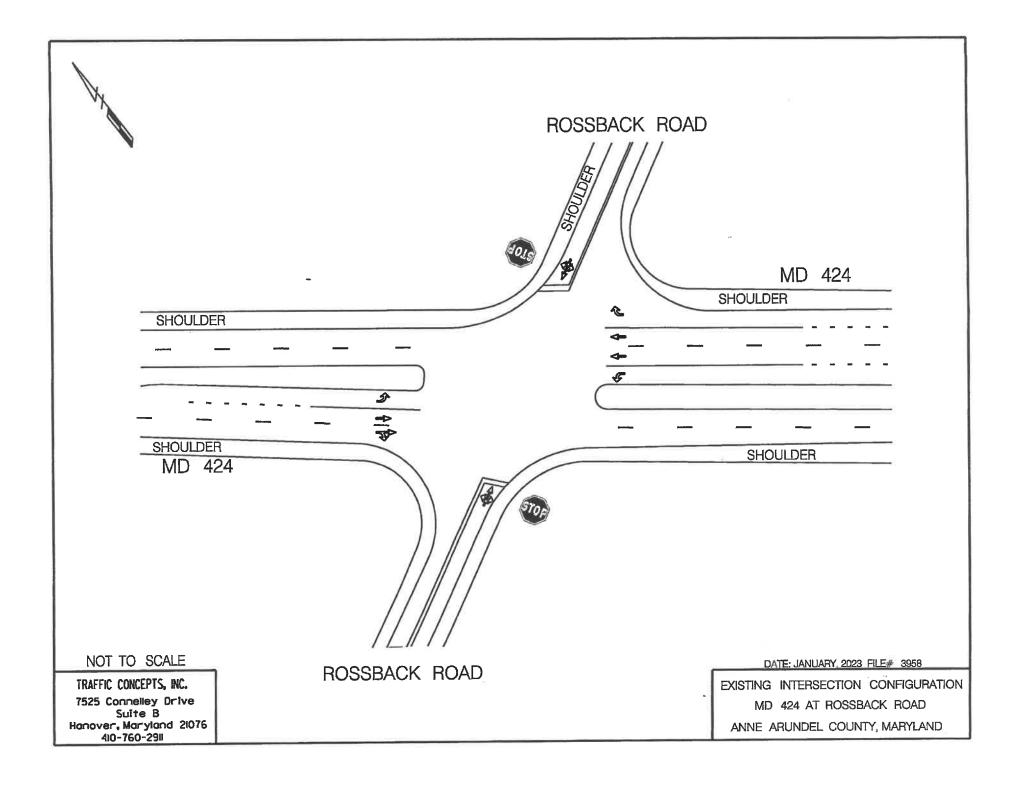
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2664 Riva Road, P.O. Box 6675 Annapolis, MD 21401 410-222-7450

Jenny Jarkowski Planning and Zoning Officer

February 7, 2023

Mr. Jon Mayer Traffic Concepts, Inc. 7525 Connelley Drive, Suite B Hanover, MD 21076

RE 2882 Patuxent River Road Traffic Impact Study Scoping Letter

Dear Mr. Mayer:

This letter is in response to your traffic impact study scoping letter dated January 12, 2023, 2882 Patuxent River Road project located in Davidsonville. The study limits as described in your letter are accepted.

Please also note the following conditions that must be addressed in the study, in accordance with, and in addition to, the "Guidelines for Traffic Impact Studies" found in the Anne Arundel County Design Manual, Chapter 3, and Appendix N:

- All counts are subject to Green Notice OPZ-21-06.
- Note that if any changes are made to the site layout resulting in access point changes, the scope of study will need to be revised accordingly.
- In accordance with 17-5-401(a) (2), perform road rating analysis on all road segments, including state roads.
- As required in the County's Guidelines for Traffic Impact Studies, the latest version of the Highway
 Capacity Manual intersection analysis will be required for any intersection with a total critical volume of
 1300 or more. Regardless of other analyses requested by the county or provided by the applicant, a
 Critical Lane Volume (CLV) of 1450 represents a failure which must be addressed through mitigation.
- Please note that additional comments may follow from MDOT-SHA after further review.
- It is the consultant's responsibility to account for all developments under construction, and to include only the remaining build out in the background development analysis.
- Include all signalized intersections within the study limits in the intersections to be studied.
- The County will generally accept trip generation rates found in the latest edition of the Institute of Transportation Engineers Trip Generation report. This report provides three methods to determine average trip generation for proposed developments: weighted trip generation rate, a plot of actual trip ends versus an independent variable, and a regression equation. The consultant should determine which

2882 Patuxent River Road February 2023 Page Two

method provides the best fit for the type and size of the proposed development in accordance with the county's "Guideline for Traffic Impact Study" in the Design Manual. Questions of interpretation should be directed to this office, which will have the final determination of what method to be used.

• A copy of the scoping letter and this response letter must be included as an Appendix to the Traffic Impact Study when the study is submitted.

Should you have any questions regarding the information in this response letter, please contact me at pzfowl22@aacounty.org.

Sincerely,

Sarah E. Fowler, P.E. Planning Administrator

Transportation Team - Development Division

Office of Planning and Zoning

2664 Riva Road

Annapolis, MD 21401

cc: Charlie Wang, Martha Arzu-McIntosh, Chungom Ntonifor, OPZ Courtney Wilson OPZ Nestor Flores, Kirsten Cook, DPW Jonathan Makhlouf, MDOT SHA

TRAFFIC CONCEPTS, INC.

Traffic Impact Studies • Feasibility • Traffic Signal Design • Traffic Counts • Expert Testimony

January 12, 2023

Ms. Sarah Fowler, P.E. Anne Arundel County Office of Planning & Zoning 2664 Riva Road Annapolis, MD 21401

RE: 2882 Patuxent River Road
Traffic Impact Study
Scoping Letter
TC# 3958

Dear Ms. Fowler:

The above referenced project is located on the west side of Patuxent River Road south of Governor's Bridge Road in the Davidsonville portion of the county. The proposed sand and gravel operation will gain access via a single access to Patuxent River Road Attached please find an aerial diagram showing the location of the project and the proposed study limits. Since the road link of Patuxent River Road is Scenic & Historic, a road link analysis is not required.

We propose to analyze the following intersections during the weekday AM and weekday PM peak periods as part of the traffic impact study:

<u>Intersections</u>

- Patuxent River Road @ Site Access
- Patuxent River Road @ MD 214
- Patuxent River Road @ MD 424

Also, we have reviewed the County subdivision activity maps and note that there are no background developments that would impact the key intersections.

Please provide our office with any Capital Improvement Projects that may affect the proposed study area, as well as any approved mitigation proposals for the background developments listed.

Ms. Sarah Fowler, P.E. January 12, 2023 Page 2 of 2

We respectfully request that your office review and approve the study limits as well as the background development list for this project. If you have any questions or require additional information, please do not hesitate to contact our office at your convenience.

Sincerely,

TRAFFIC CONCEPTS, INC.

By: Jon F. Mayer

imayer@traffic-concepts.com

