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February 26, 2025

Maurene Epps-McNeil Zoning Hearing Examiner County Administration Building Upper Marlboro, MD 20772

RE: SE-22007 Gas Light III Surface Mine

Dear Ms. Epps-McNeil:

On February 20, 2025, after review of the technical staff report, the Prince George's County Planning Board approved the transmittal of the recommendation. Therefore, the application is hereby transmitted directly to the District Council/Zoning Hearing Examiner.

Very truly yours,

Sherri Conner

Sherri Conner, Acting Chief Development Review

Enclosure

cc: Persons of Record



PRINCE GEORGE'S COUNTY Planning Department

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Note: Staff reports can be accessed at https://www.mncppc.org/883/Watch-Meetings

Special Exception Type 2 Tree Conservation Plan GAS LIGHT III SURFACE MINE

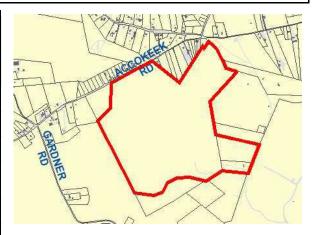
SE-22007 TCP2-033-2024

AGENDA ITEM: 4D

AGENDA DATE: 2/20/2025

REQUEST	STAFF RECOMMENDATION
SE-22007: Expansion of an existing surface mining operation. Variance: for the removal of four specimen	With the conditions recommended herein: • Approval of Special Exception SE-22007 • Approval of Type 2 Tree Conservation Plan TCP2-033-2024
trees	• Approval of a Variance to Section 25-122(b)(1)(G)

Location: On the south side of MD 373 (Accokeek Road), approximately 6,600 feet west of the intersection of MD 373 and McKendree Road			
Gross Acreage:	328.02		
Zone:	AR		
Zone Prior:	R-A		
Reviewed per prior Zoning Ordinance:	Section 27-1903		
Dwelling Units:	0		
Gross Floor Area:	0		
Lots:	0		
Parcels:	3		
Planning Area:	85A		
Council District:	09		
Municipality:	N/A		
Applicant/Address: Holcim-MAR, INC. 6401 Golden Triangle Drive, Suite 400 Greenbelt, MD 20770			
Staff Reviewer: Evan King Phone Number: 301-952-3554 Email: Evan.King@ppd.mncppc.org			



Planning Board Date:	02/20/2025		
Planning Board Action Limit:	N/A		
Staff Report Date:	02/12/2025		
Date Accepted:	06/28/2024		
Informational Mailing:	02/19/2024		
Acceptance Mailing:	06/17/2024		
Sign Posting Deadline:	N/A		

Table of Contents

I.	EVALUATION CRITERIA	4
A.	Prince George's County Zoning Ordinance	4
В.	Prince George's County Woodland and Wildlife Habitat Conservation Ordinance	4
C.	Prince George's County Tree Canopy Coverage Ordinance	5
II.	BACKGROUND	5
Α.	Summary and Request	5
В.	Development Data Summary	5
C.	Location and Site Description	5
D.	Proposed Use(s)	5
Ε.	Neighborhood and Surrounding Uses	5
F.	History and Previous Approvals	6
III.	COMPLIANCE WITH APPLICABLE PROVISIONS OF THE ZONING ORDINANCE	6
IV.	COMPLIANCE WITH APPLICABLE PROVISIONS OF THE 2010 PRINCE GEORGE'S COU	
	LANDSCAPE MANUAL	14
V.	COMPLIANCE WITH APPLICABLE PROVISIONS OF THE 2010 PRINCE GEORGE'S COUNTY WOODLAND AND WILDLIFE HABITAT CONSERVATION ORDINANCE	14
VI.	COMPLIANCE WITH APPLICABLE PROVISIONS OF THE PRINCE GEORGE'S COUNTY	
	TREE CANOPY COVERAGE ORDINANCE	17
VII.	REFERRAL COMMENTS	17
VIII.	COMMUNITY FEEDBACK	26
IX.	RECOMMENDATION	26

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

PRINCE GEORGE'S COUNTY PLANNING BOARD

TECHNICAL STAFF REPORT:

TO: The Prince George's County Planning Board

The Prince George's County District Council

VIA: Jeremy Hurlbutt, Supervisor, Zoning Section,

Development Review Division

FROM: Evan King, Planner II, Zoning Section,

Development Review Division

SUBJECT: Special Exception SE-22007

Type 2 Tree Conservation Plan TCP2-033-2024

Gas Light III Surface Mine

REQUEST: **SE-22007:** Special exception for the expansion of an existing surface mining

operation.

Variance: for the removal of four specimen trees

RECOMMENDATION: APPROVAL, with conditions

NOTE:

The Prince George's County Planning Board has scheduled this application on the consent agenda, for transmittal to the Zoning Hearing Examiner, on the agenda date of February 20, 2025.

You are encouraged to become a person of record in this application. Requests to become Persons of Record should be submitted electronically, by email to: ZHE@co.pg.md.us. Questions about becoming a person of record should be directed to the Hearing Examiner at 301-952-3644. All other questions should be directed to the Development Review Division at 301-952-3530.

The Zoning staff has reviewed the subject application and presents the following evaluation and findings leading to a recommendation of APPROVAL, with conditions, as described in the Recommendation section of this technical staff report.

I. EVALUATION CRITERIA

A. Prince George's County Zoning Ordinance. This property is located within the Agriculture-Residential (AR) Zone. It was previously located within the Residential-Agricultural (R-A) Zone. Pursuant to Section 27-1903 of the Prince George's County Zoning Ordinance, development applications of any type for properties not in the Legacy Comprehensive Design (LCD), Legacy Mixed-Use Community (LMXC), and Legacy Mixed-Use Town Center (LMUTC) Zones may utilize the prior Prince George's County Zoning Ordinance for development of the subject property. The subject property is an expansion of a project that received prior development approval for surface mining operation under Special Exception SE-4651, which was approved on April 15, 2010, under the prior Zoning Ordinance. Accordingly, this application is being reviewed pursuant to the prior Zoning Ordinance. Staff considered the following criteria in reviewing this application:

A Special Exception (SE) is reviewed and decided by the Prince George's County Zoning Hearing Examiner. Pursuant to Section 27-317(a) of the prior Prince George's County Zoning Ordinance, an SE may only be approved upon a finding that all of the following standards are met:

- 1. The proposed use and site plan are in harmony with the purpose of this Subtitle;
- 2. The proposed use is in conformance with all the applicable requirements and regulations of this Subtitle;
- 3. The proposed use will not substantially impair the integrity of any validly approved Master Plan or Functional Master Plan, or, in the absence of a Master Plan or Functional Master Plan, the General Plan;
- 4. The proposed use will not adversely affect the health, safety, or welfare of residents or workers in the area;
- 5. The proposed use will not be detrimental to the use or development of adjacent properties or the general neighborhood; and
- 6. The proposed site plan is in conformance with an approved Type 2 Tree Conservation Plan; and
- 7. The proposed site plan demonstrates the preservation and/or restoration of the regulated environmental features in a natural state to the fullest extent possible in accordance with the requirements of Subtitle 24-130(b)(5).
- **B.** Prince George's County Woodland and Wildlife Habitat Conservation Ordinance. Pursuant to Section 25-119(a)(2)(B) of the Prince George's County Code, SE applications shall include a Type 2 tree conservation plan (TCP2) or a standard letter of exemption.

C. Prince George's County Tree Canopy Coverage Ordinance. The subject site is exempt from the requirements of the Prince George's County Tree Canopy Coverage Ordinance as it is located in the AR Zone, formerly the R-A Zone.

II. BACKGROUND

A. Summary and Request: Special exception for the expansion of an existing surface mining operation.

B. Development Data Summary:

	EXISTING	EVALUATED		
Zone(s)	AR (prior R-A)	R-A		
Use	Surface Mining	Surface Mining		
Lot(s)	0	0		
Parcel(s)	3	3		
Total Gross Acreage	328.02	328.02		
Gross Floor Area	N/A	N/A		

- **C. Location and Site Description:** The subject property is located on the south side of MD 373 (Accokeek Road), approximately 6,600 feet west of the intersection of MD 373 and McKendree Road. The 328.02-acre property consists of three parcels known as Parcel 19, Parcel 21, and Parcel 124. It is adjacent to a 683.26-acre tract of land owned by the applicant and previously approved for surface mining operations under Special Exception SE-4651. This application requests to expand the overall surface mining operations to the subject property.
- **D. Proposed Use(s):** The subject application is for the expansion of an existing surface mining operation. The subject property is adjacent to an existing approved surface mining operation. The proposed expansion will be for material extraction only. All material extracted from the subject property will be washed at the existing wet processing facility located on the adjoining property. Under this proposal, the material extracted from the subject property will be mechanically transported across the property line to the processing facility by means of a conveyor system; thus, negating any need for the raw material to be transported off-site by truck for processing.
- **E. Neighborhood and Surrounding Uses:** The general neighborhood is residential and agricultural in character. The neighborhood is bordered by Floral Park Road to the north, MD 5 (Branch Avenue) to the east, Gardiner Road to the south, and MD 210 to the west. MD 373 will be the primary access to the operation. The immediate uses surrounding the subject property are as follows:

North— MD 373, and beyond by single-family detached dwellings and vacant land in the AR Zone (previous R-A Zone).

East— An existing surface mining wash plant and vacant property in the AR Zone (previous R-A Zone).

South— Vacant property in the AR Zone (previous R-A Zone).

West— Vacant property in the AR Zone (previous R-A Zone).

F. History and Previous Approvals: The subject property has no prior approvals, preliminary plan of subdivision (PPS) or final plat for the subject property. However, for context, prior approvals for the adjacent surface mining operations, for which this case is requesting an expansion of, are listed below:

SE-4402 was approved, with conditions, by the Prince George's County District Council in 2002 and was final after the Court of Special Appeals' confirmation of the District Council's approval, in 2004. The SE allowed for surface mining on approximately 683.26 acres in the R-A and R-E Zones adjacent to the subject application.

SE-4403 was approved, with conditions, by the District Council on June 17, 2002, for a sand and gravel wet processing facility, for a period of 15 years in the R-A and R-E Zones adjacent to the subject application.

SE-4651 was approved, with conditions, by the Zoning Hearing Examiner on April 15, 20I0, to continue the surface mining use for a period of five years in the R-A and R-E Zones adjacent to the subject property.

SE-4790 was approved, with conditions, by the Zoning Hearing Examiner on June 6, 2017, to continue the sand and gravel wet processing operation adjacent to the subject property.

III. COMPLIANCE WITH APPLICABLE PROVISIONS OF THE ZONING ORDINANCE

This application, for the expansion of a surface mining operation through an SE, is being reviewed in accordance with the prior Zoning Ordinance. The analysis of all required findings for approval are provided below.

Required Findings—Section 27-317 of the prior Prince George's County Zoning Ordinance provides the following applicable findings:

- (a) A Special Exception may be approved if:
 - (1) The proposed use and site plan are in harmony with the purpose of this Subtitle.

The purposes of Subtitle 27 of the Prince George's County Code, as set forth in Section 27-1300 of the Zoning Ordinance, are to protect the health, safety, and welfare of the public; to promote compatible relationships between various land uses; to guide orderly development; and to ensure adequate public facilities and services.

Staff find that the proposed use is in harmony with these purposes and will not negatively impact the health, safety, and welfare of the public. The proposed surface mining operation will be adequately buffered from any residential uses. It will provide ongoing employment opportunities to the public and provide much needed materials for development activity to the surrounding areas.

(2) The proposed use is in conformance with all the applicable requirements and regulations of this Subtitle;

The proposed use is in conformance with the requirements and regulations set forth in Subtitle 27.

The proposed use is being evaluated according to the general required findings of approval for all SEs contained in Sections 27-317, 27-410, 27-445.02 and 27-625 of the prior Zoning Ordinance, as discussed below.

(3) The proposed use will not substantially impair the integrity of any validly approved Master Plan or Functional Master Plan, or, in the absence of a Master Plan or Functional Master Plan, the General Plan:

The 2014 Plan Prince George's 2035 Approved General Plan (Plan 2035) places this application in the rural and agricultural areas (Map 11: Growth Policy Map, page 107). The vision for rural and agricultural areas is to serve as locations for low-density residential units or to support park and open space land uses and focus new investment on maintaining existing infrastructure and stabilizing small-scale neighborhood-oriented commercial activities that support the areas rural lifestyle and character. Plan 2035 recommends continuing to protect these areas in order to preserve the agricultural sector and the land base on which it depends.

The 2013 Approved Subregion 5 Master Plan and Sectional Map Amendment (master plan) recommends rural land use on the subject property (Map IV-1: Future Land Use, page 32). The proposed use conforms with the recommended land use because the master plan recognizes the importance of sand and gravel mining to the County and to the greater Washington, D.C. region (page 153), while also restricting sand and gravel mining to the rural and agricultural areas (page 154), especially within the priority preservation area (page 58).

Mineral extraction is a historically important industry in Subregion V, based on the presence of large sand and gravel deposits affiliated with the Brandywine geological formation. The mining industry supports other independent businesses in the region, predominately in the trucking industry, generating spin-offs to the local economy, though the specific amount of positive impact to the County has not been quantified in the master plan. This proposal is an expansion of an existing mining operation within a rural area. The master plan specifically restricts sand and gravel mining to rural areas, with the long-term goal of reclaiming mining sites and turning them into land that can support productive agriculture and forestry. Following the conclusion of the mining of this site, it will be reclaimed for residential development purposes, thereby encouraging the retention of valuable land resources for the future single-family detached residential subdivision lots.

The 2017 Countywide Green Infrastructure Plan (Green Infrastructure Plan) was approved with the adoption of the *Approved Prince George's County Resource Conservation Plan: A Countywide Functional Master Plan* (CR-11-2017) on March 7, 2017. According to the Green Infrastructure Plan, this site does contain regulated and evaluation areas.

The application area is not located within a sensitive species project review area or special conservation area. The nearest special conservation area is the Mattawoman stream valley system, located to the south. There are designated evaluation and regulated areas as defined in the Green Infrastructure Plan on the subject property. On-site regulated environmental features (REF) such as three unnamed tributaries to North Branch Mattawoman Creek, associated stream buffers, nontidal wetlands, wetland buffer and 100-year floodplain were identified on the approved natural resources inventory (NRI). The site is mostly wooded with open canopy areas within floodplain areas.

This mining application is required to restore the areas that are proposed for mining activities. The restoration measures include the filling, regrading, and replanting of the mining area once all mining activities have ceased. The on-site reforestation planting and preserved woodlands will be further protected when placed in a woodland and wildlife habitat conservation easement.

To further protect the existing REF during the proposed mining, stormwater management (SWM) facilities will be reviewed by the Prince George's County Department of Permitting, Inspections and Enforcement (DPIE); the sediment and erosion control measures will be reviewed by the Prince George's County's Soil Conservation District; and, the mining activities by the Maryland Department of the Environment – Division of Minerals, Oils, and Gas.

Staff find that the proposed expansion of the surface mining operation is consistent with the Green Infrastructure Plan, Plan 2035 and master plan goals, policies, and strategies for the subject property.

(4) The proposed use will not adversely affect the health, safety, or welfare of residents or workers in the area;

As previously discussed, this application is an expansion of an existing surface mining operation. Mined materials will be transported, via mechanical conveyor, across the shared property line with the adjacent existing wash plant. No trucking of material from the subject property is proposed. The proposed mining operations will be sufficiently buffered from surrounding uses.

The proposed use is subject to County and state regulations related to environmental management and safety that will protect the

health, safety, and welfare of residents nearby and workers on-site. A detailed analysis of the potential impacts is provided in the Environmental Impact Report (EIR-22007). Recommended conditions are proposed herein to address potential impacts.

Staff find that the proposed use will not adversely affect the health, safety, or welfare of residents or workers in the area.

(5) The proposed use will not be detrimental to the use or development of adjacent properties or the general neighborhood; and

The general neighborhood is residential and agricultural. As previously noted, the properties to the south and west are currently vacant. The property to the east is the existing surface mining wash facility. To the north there are single-family residential dwellings, but the proposed surface mining operation will be sufficiently buffered from these uses, as will be further discussed below.

(6) The proposed site plan is in conformance with an approved Type 2 Tree Conservation Plan; and

Type 2 Tree Conservation Plan TCP2-033-2024 was submitted with this SE application. Minor revisions to the TCP2 are required for conformance and are included in the Recommendation section of this staff report.

(7) The proposed site plan demonstrates the preservation and/or restoration of the regulated environmental features in a natural state to the fullest extent possible in accordance with the requirements of Subtitle 24-130(b)(5).

The TCP2 shows an encroachment into the REF for one impact, for the construction of an elevated conveyor system and access road to cross an intermittent stream system. A statement of justification (SOJ) was included in the SE, which was received on June 28, 2024. The primary management area (PMA) impacts, for the construction of a conveyor and access road, total 0.80 acre (185 linear feet of stream bed and 0.72 acre of 100-year floodplain). These impacts are considered necessary for the orderly development of the subject property as a surface mine, and staff find the REF have been preserved and/or restored to the fullest extent possible.

Additional Requirements for Specific Special Exceptions—Section 27-410 Surface mining, of the prior Zoning Ordinance provides the following applicable requirements:

- (a) The surface mining of natural materials or deposits (including sand, gravel, or clay pits; rock or stone quarries; and the removal of earth or topsoil) may be permitted, subject to the following:
 - (1) Heavy machinery may be used for the extraction of natural material or deposits from the site. Except in the I-2 Zone, heavy

machinery may not be used for washing, refining, or other processing, unless a Special Exception is granted for sand and gravel wet-processing under the provisions of Section 27-405;

The subject SE will only use heavy machinery for the extraction of sand and gravel from the subject property on-site. Extracted material will be transported via an on-site conveyor system to the existing wash plant located on an adjacent site. No heavy machinery will be used on-site for the washing, refining, or other processing of mined materials.

(2) The use shall not be noxious, offensive, or otherwise objectionable by reason of dust, smoke, noise or vibration;

Measures have been taken to assure the use will not be noxious, offensive, or otherwise objectionable by reason of dust, smoke, noise or vibration. Measures include a 50-foot setback along the northern and western boundaries and additional 15-foot-high berms. Further evaluation has been addressed in the associated environmental impact report.

(3) The land areas exposed by the extraction and removal of natural materials or deposits shall be left suitable for development. A grading plan shall be submitted (along with the site plan) showing the existing and proposed ground elevations of the site, adjacent land, and all abutting streets. The exposed land area shall have a slope not greater than three-to-one (3:1), except where any portion of the site is developed for port or harbor facilities;

The submitted SE, landscape plan, and TCP2 show the proposed reclamation final grades. None of the proposed grades have a slope greater than 3:1.

- (4) The Special Exception shall be valid for not longer than five (5) years, except where the use is located:
 - (A) In an R-R Zone which is predominantly undeveloped for a radius of one (1) mile from the operation; or
 - (B) In an I-2 Zone;

The Appellate Court of Maryland held in *East Star, LLC v. Cnty. Comm'rs of Queen Anne's Cnty.*, 203 Md. App. 477, 38 A.3d 524 (2012) that local regulations that place time periods on the operation of a sand and gravel mine are preempted by state law and, therefore, illegal. The Zoning Hearing Examiner has previously acknowledged this decision and did not place a time limit on SE-4647 or SE-4651.

(5) In addition to the requirements of Section 27-296(c), the site plan shall show an estimate of the time required for the removal of the material;

Notwithstanding the local jurisdiction's inability to limit the time period for such uses, as the same is preempted by state law, the applicant anticipates that the extraction and removal of material from the site will be approximately eight years.

(6) At least sixty (60) calendar days prior to the hearing before the Zoning Hearing Examiner, the applicant shall file a traffic analysis with the Zoning Hearing Examiner for inclusion in the record, and shall send a copy to the Planning Board. The traffic analysis shall include the volume of traffic expected to be generated by the operation, and shall identify the streets to be used between the site and the nearest street (to be used) that has a minimum paved width of twenty-four (24) feet for the predominant length of the street;

A traffic analysis prepared by Lenhart Traffic, in accordance with the standards of this section, was submitted with this application. The Transportation Planning Section found that the proposed sand and gravel wet processing plant use would meet the requirements of Subtitle 27, for the approval of an SE from the standpoint of transportation. Recommended conditions were included in this report.

(7) Driveways or access points shall be identified on the site plan, and shall be located so as not to endanger pedestrians or create traffic hazards. The surface material to be used on the driveways shall be identified on the site plan. Any access driveway shall be at least twenty-two (22) feet wide, and shall be paved for a distance of at least two hundred (200) feet from the boundary line of the Special Exception.

Two proposed access points are clearly identified on the site plan. Signs will be posted 500 feet in advance of the driveway entrance, so that they will not create traffic hazards. One proposed point of entrance, along the south side of MD 373 (Accokeek Road), is located approximately 6,260 feet to the west of McKendree Road. The sight distance at the entrance point is over 500± feet in both the easterly and westerly directions on MD 373; and is, therefore, in accordance with established highway safety guidelines. The entrance from MD 373 will be paved to a width of 22 feet, and it will have a paved length of approximately 200 feet, as shown on the accompanying site plan. A second point of entrance proposes to connect to an existing access road on the adjoining property owned by Bardon, Inc. This property is also a surface mining operation (SE-4403) and, therefore, will not endanger pedestrians.

(8) The Technical Staff Report prepared in response to the application shall include a current, Countywide inventory of the

locations, dates of approval, and conditions of approval concerning haul routes and estimated loads per day for all approved and pending Special Exceptions for sand and gravel wet-processing, sanitary landfills and rubble fills, and surface mining, as indicated by the record in the case. The inventory shall also include the locations of all nonconforming sand and gravel wet-processing, sanitary landfills and rubble fills, and surface mining operations throughout the County that were certified after September 6, 1974.

This information has been provided in the environmental impact report.

Additional Requirements for Specific Uses—Section 27-445.02 Surface mining; sand and gravel wet-processing, of the prior Zoning Ordinance provides the following applicable requirements:

(a) In order for any surface mining or sand and gravel wet-processing operation to continue, the requirements of this Section shall be met.

The requirements of this section have been met, as discussed above and below.

(b) The purposes of this Section are to prevent or control the detrimental effects of surface mining and sand and gravel wet-processing operations upon neighboring properties, and existing and proposed land uses in the general area.

The purposes of this section have been met, as discussed above and below.

- (c) All surface mining and sand and gravel wet-processing operations shall meet the following requirements:
 - (1) The uses shall be operated in full compliance with applicable extraction and surface mining or sand and gravel wetprocessing regulations;

The proposed mining operation shall be operated in full compliance, to meet or exceed all applicable laws and safety regulations of the federal, state, and County governments, via the permit review process which enforces said regulations.

(2) For the safety of residents and property, the operator of the facility shall take effective measures to control the speed of trucks utilizing his facility and neighboring streets;

As previously stated, this operation will convey materials to the adjacent, existing wash plant. Traffic to the subject property will be limited to employees and visitors. Material shall be transported off-site by truck from the existing wash plant on the adjacent site. This existing wash plant has been in use for several years under SE-4651 and SE-4402 approvals. Staff find this application meets the

transportation requirements with the conditions provided in this report.

(3) The operator shall avoid depositing any debris upon any existing streets; and

As previously stated, this operation will convey materials to the adjacent, existing wash plant. These measures are currently in place and operational for the existing use and have proven to be successful in ensuring that debris is not deposited upon any existing streets.

(4) The owner of the subject property shall be required to post and maintain a permanent, durable sign identifying the use as a surface mining or sand and gravel wet-processing operation, in accordance with the requirements of Section 27-629.

As previously stated, this operation will convey materials to the adjacent, existing wash plant. The applicant has previously posted and maintained a sign at the main entrance to the adjacent property, which identifies the use of the subject property as a surface mining operation. In addition, the application does include a sign for the entrance to the subject property. This is discussed below.

Signs for Specific Uses—Section 27-625 Surface mining; sand and gravel wet-processing identification, of the prior Zoning Ordinance provides the following applicable requirements:

- (a) Area.
 - (1) Not less than 9, nor more than 16, square feet.

The 5-foot by 3-foot sign submitted with this application is 15 square feet.

- (b) Location.
 - (1) All signs shall be conspicuous and legible.

The proposed signage submitted with this application is conspicuous and legible.

- (c) Quantity.
 - (1) If the property has frontage on one (1) or more improved public streets, there shall be one sign posted for each one thousand (1,000) feet (or fraction) of street frontage on each street.
 - (2) If the property does not have frontage on an improved public street, there shall be one (1) sign posted within the right-of-way or easement which provides vehicular access to the property.

The subject property has approximately 2,313± feet of street frontage on MD 373. The SE shows one sign adjacent to the proposed entrance onto the subject property.

(d) Height.

(1) Not less than four (4), nor more than eight (8), feet above the finished grade of the improved street if it is to be viewed from a public street.

The signage detail submitted with this application has a maximum height of 8 feet above finished grade.

(e) Contents.

- (1) Each sign shall contain the following information:
 - (A) Identification of the use as a surface mining or sand and gravel wet-processing operation;
 - (B) Size of the property (in acres);
 - (C) Name of the owner of the property and operator of the facility;
 - (D) A legal description of the property, including the subdivision name, lot and block numbers, or liber and folio numbers; and
 - (E) Instructions for obtaining additional information about the operation.

The signage detail submitted with this application is in accordance with this criterion.

IV. COMPLIANCE WITH APPLICABLE PROVISIONS OF THE 2010 PRINCE GEORGE'S COUNTY LANDSCAPE MANUAL

The proposed development is subject to the requirements of the 2010 *Prince George's County Landscape Manual* (Landscape Manual). Specifically, conformance is required for Section 4.6, Buffering Development from Streets; Section 4.7, Buffering Incompatible Uses, and Section 4.9, Sustainable Landscaping Requirements. Staff find that the proposed landscape plan meets these requirements.

V. COMPLIANCE WITH APPLICABLE PROVISIONS OF THE 2010 PRINCE GEORGE'S COUNTY WOODLAND AND WILDLIFE HABITAT CONSERVATION ORDINANCE

This property is subject to the grandfathering provisions of the 2024 Woodland Conservation Ordinance because the TCP2 provided with this application was accepted for review on or before June 30, 2024. This application shall conform to the environmental regulations of the 2010 Prince George's County Woodland and Wildlife Habitat Conservation Ordinance (WCO). TCP2-033-2024 was submitted with the SE application.

Based on the TCP2, the site's gross tract area is 351.29 acres, with 66.84 acres of 100-year floodplain, resulting in a net tract area of 284.45 acres. The site contains 284.45 acres of woodland on the net tract and 65.33 acres of wooded floodplain. The woodland conservation threshold is 50 percent, and the requirement is 142.23 acres.

The woodland conservation worksheet proposes the removal of 226.86 acres in the net tract area, and 0.58 acre within the floodplain, for a woodland conservation requirement of 263.00 acres. The woodland conservation requirement is proposed to be met with 57.59 acres of woodland preservation on-site and 205.41 acres of reforestation on-site. The entire woodland conservation requirement will be met on-site through preservation and reforestation plantings. The NRI has identified 17 specimen trees on-site and the applicant requests that four specimen trees be removed as part of this application.

Technical revisions are required to the TCP2, which are included in the Recommendation section of this report.

Specimen Trees

Section 25-122(b)(1)(G) of the County Code requires that "Specimen trees, champion trees, and trees that are part of a historic site or are associated with a historic structure shall be preserved and the design shall either preserve the critical root zone of each tree in its entirety or preserve an appropriate percentage of the critical root zone in keeping with the tree's condition and the species' ability to survive construction as provided in the [Environmental] Technical Manual." The code, however, is not inflexible.

The authorizing legislation of Prince George's County's WCO is the Maryland Forest Conservation Act, which is codified under Title 5, Subtitle 16 of the Natural Resources Article of the Maryland Code. Section 5-1611 of the Natural Resources Article requires the local jurisdiction to provide procedures for granting variances to the local forest conservation program. The variance criteria in Prince George's County's WCO are set forth in Section 25-119(d). Section 25-119(d)(4) clarifies that variances granted under Subtitle 25 are not considered zoning variances.

A Subtitle 25 variance application and an SOJ in support of the variance was received for review with this application and is dated April 24, 2024. The application area contains 17 on-site specimen trees with good condition ratings (Specimen Trees ST-3, ST-5, ST-6, ST-7, ST-8, ST-9, ST-10, ST-11, ST-13, and ST-15), fair condition ratings (Specimen Trees ST-2, ST-12, ST-14, and ST-16), and poor condition ratings (Specimen Trees ST-1, ST-4, and ST-17). The mining limits of disturbance proposes the removal of four specimen trees, specifically ST-1, ST-3, ST-6, and ST-17.

Statement of Justification Request:

A variance from Section 25-122(b)(1)(G) is requested for the removal of four specimen trees. This variance is requested to the Woodland and Wildlife Habitat Conservation Ordinance, which requires, under Section 25-122(a)(1) of the County Code, that "woodland conservation shall be designed as stated in this Division unless a variance is approved by the approving authority for the associated case." Section 25-122(b)(1)(G) requires the preservation of specimen trees. The applicant provided a Subtitle 25 variance application and SOJ to demonstrate how the findings of Section 25-119(d)(1) are being met.

The text in **bold**, labeled A-F, are the six criteria listed in Section 25-119(d)(1). The plain text provides staff responses to the criteria.

(A) Special conditions peculiar to the property have caused the unwarranted hardship;

Specimen Trees ST-1, ST-3, ST-6, and ST-17 are located outside of the REF. These trees are requested for removal to achieve mining extraction areas outside of the on-site REF areas. Special conditions peculiar to the property would cause an unwarranted hardship if the applicant were required to retain the four specimen trees identified as ST-1, ST-3, ST-6, and ST-17. The condition rating of the trees is two in good condition and two in poor condition; the construction tolerance of the White oak is medium, and the American beech has a poor tolerance; and the four trees are located within the proposed mining area. The mining application area is mostly wooded, with identified sand and gravel deposits below the surface. As shown on the TCP2, ST-3 and ST-6 are located within the clearing area that will be reforested as WRA-1; ST-1 and ST-17 are located in the clearing area that will be reforested as WRA-2. Requiring the applicant to retain the four specimen trees on-site would prevent the applicant from obtaining all available sand and gravel below the surface, to the extent that it would cause the applicant an unwarranted hardship. In addition, preserving the REF areas is important due to the proximity to the Mattawoman Creek stream valley, which is identified as a County special conservation area within the Green Infrastructure Plan. To minimize impacts to REF and their woodland buffers, the mining is limited where possible to outside of the REF.

(B) Enforcement of these rules will deprive the applicant of rights commonly enjoyed by others in similar areas.

Enforcement of the requirement that all specimen trees be preserved would deprive the applicant of rights commonly enjoyed by other properties in similar areas. The overall site contains 17 specimen trees, and the applicant is proposing to remove four of these trees. If the applicant were required to save these four specimen trees, the applicant would not be able to remove the underlying mineral deposits. As a result, it would deprive the applicant of rights commonly enjoyed by other properties in similar areas.

(C) Granting the variance will not confer on the applicant a special privilege that would be denied to other applicants.

This is not a special privilege that would be denied to other applicants. If other similar mining developments contained specimen trees within mineral deposit areas, it would be given the same consideration during the review of the required variance application.

(D) The request is not based on conditions or circumstances which are the result of actions by the applicant.

The applicant has taken no actions leading to the conditions or circumstances that are the subject of the variance request. The removal of specimen trees identified as ST-1, ST-3, ST-6, and ST-17 is the result of the location of the subsurface mineral deposits and the result of the mining extraction process.

(E) The request does not arise from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property; and

There are no existing conditions, existing land, or building uses on-site or on neighboring properties that have any impact on the location or size of the four specimen trees. Specimen Trees ST-1, ST-3, ST-6, and ST-17 have grown to specimen tree size based on natural conditions and have not been impacted by any neighboring land or building uses.

(F) Granting of the variance will not adversely affect water quality.

The removal of four specimen trees will not adversely affect water quality. The project will be subject to the requirements and protections of waterways by the Maryland Department of the Environment, Prince George's County Soil Conservation District, and the approval of a stormwater concept plan by DPIE. They will meet their total woodland conservation requirements with on-site preservation and reforestation plantings.

VI. COMPLIANCE WITH APPLICABLE PROVISIONS OF THE PRINCE GEORGE'S COUNTY TREE CANOPY COVERAGE ORDINANCE

The subject site is exempt from the requirements of the Prince George's County Tree Canopy Coverage Ordinance in accordance with Section 25-127(b)(1)(D) of the County Code, which exempts properties located in the AR Zone.

VII. REFERRAL COMMENTS

The subject application was referred to the concerned agencies and divisions. The referral comments are incorporated herein by reference, and major findings are summarized as follows:

- a. **Community Planning**—In a memorandum dated August 21, 2024 (Calomese to Price), the Community Planning Division found that, pursuant to Section 27-317(a)(3) of the prior Zoning Ordinance, this SE application will not impair the integrity of the master plan.
- b. **Transportation Planning**—In a memorandum dated January 16, 2025 (Patrick to Price), the Transportation Planning Section determined that the proposed plan is acceptable, with conditions.
- c. **Environmental Planning**—In a memorandum dated January 7, 2025 (Schneider to Price), the Environmental Planning Section provided an analysis of the subject application.

ENVIRONMENTAL CONFORMANCE WITH APPLICABLE PLANS

Plan Prince George's 2035 Approved General Plan (2014)

The site is located within the Environmental Strategy Area 3 of the Regulated Environmental Protection Areas Map and is in the rural and agricultural area of the General Plan Growth Policy Map, as designated by Plan 2035. The property is located within a priority preservation area. This area contains subsurface minerals that need to be extracted to be used for building materials. The General Plan states

that priority preservation areas include areas that contain productive agricultural or forest soils; or are capable of supporting profitable agricultural and forestry enterprises where productive soils are lacking. This application area plans on harvesting the on-site woodlands within the mining area, extracting the valuable materials, restoring, and replanting the mining areas, and placing the existing and proposed woodlands within a protective woodland conservation easement.

Subregion 5 Master Plan and Sectional Map Amendment – Section V: Environment

The site is located within the *Approved Subregion 5 Master Plan and Sectional Map Amendment* (July 2013). In the master plan, the section on Environment contains eight sections (A–H), each of which contain policies and strategies. The text in **bold** is the policy text from the master plan, and the plain text provides staff comments on plan conformance.

A. Green Infrastructure

- Implement the master plan's desired development pattern while protecting sensitive environmental features and meeting the full intent of environmental policies and regulations.
- Ensure the new development incorporates open space, environmental sensitive design, and mitigation activities.
- Protect, preserve, and enhance the identified green infrastructure network.

The application area is not within a master plan special conservation area; however, the on-site stream systems are part of the North Branch of the Mattawoman Creek which eventually flows into the Mattawoman Creek. The main branch of the Mattawoman Creek is identified as a special conservation area. The site contains mapped regulated area within the Green Infrastructure Plan along the stream systems. The woodland adjacent to the regulated areas is mapped as evaluation areas within the Green Infrastructure Plan. These areas are the highest priority for preservation of REF and woodland.

The 2010 WCO requires priority be placed on the preservation and planting of floodplain, wetlands, and stream corridors, and emphasizes the preservation of large contiguous woodland within the green infrastructure network. The site contains mapped forest interior dwelling species habitat, which is an additional high priority for preservation and enhancement of on-site woodland.

The mining application proposes to remove all on-site woodland areas except for the woodlands within the PMA and along MD 373. There is identified mineral product (sand and gravel) below the surface of the application area. One PMA impact area, for the construction of an elevated conveyor system and access road, is proposed in the southeast corner of the site. At the end of the mining extraction process, the applicant is required to reclaim, regrade, and replant the site to the former natural conditions. The woodland conservation worksheet on the TCP2 shows the removal of

226.86 acres of woodland in the net tract area, and the removal of 0.58 acre of woodland within the floodplain, resulting in a woodland conservation requirement of 263.00 acres. According to the worksheet, the requirement is proposed to be met with 57.59 acres of woodland preservation on-site and 205.41 acres of reforestation on-site. All of the woodland conservation requirements will be met on-site with on-site preservation and reforestation plantings. The NRI has identified 17 specimen trees on-site, and this application requests the removal of four specimen trees.

Impacts to REF are limited to those required or only necessary for development, such as one elevated conveyor system and access road impact.

B. Water Quality, Stormwater Management, and Groundwater

- Encourage the restoration and enhancement of water quality in degraded areas and the preservation of water quality in areas not degraded.
- Protect and restore groundwater recharge areas such as wetlands and the headwater areas of streams.

The SE application is for new surface mining area which is reviewed by several state and local government agencies for SWM. All mining activities are reviewed by MDE – Minerals, Oils, and Gas Division. The areas outside the mining activity are reviewed by DPIE.

The submitted TCP2 and plat of special exception site and landscape plan show the proposed sediment basins and traps for the on-site reclamation efforts. Active surface mining controls stormwater within the actual mining excavation pit. Stormwater is directed towards the pit, where sediment can be filtered through the existing mineral deposits. The stormwater outside the excavation area will flow towards the existing drainage pattern.

The applicant has submitted an unapproved DPIE 55642-2024-SDC Site Development Concept Plan with this application that is in review with DPIE. The submitted plan is for the construction of the employee and visitor entrance road off of MD 373. No wetlands or stream impacts are associated with the proposed access road.

The application proposes one temporary elevated conveyor and access road crossing, which will impact an intermittent stream system, stream buffer, and PMA. This proposed impact area was approved by the MDE–Nontidal Wetland Division. The remaining on-site streams, wetland, associated buffer, and 100-year floodplain are proposed for preservation with this application.

C. Watersheds

• Ensure that, to the fullest extent possible, land use policies support the protection of the Mattawoman Creek and Piscataway Creek watersheds.

- Conserve as much land as possible, in the Rural Tier portion of the watershed, as natural resource land (forest, mineral, and agriculture).
- Minimize impervious surfaces in the Developing Tier portion of the watershed through use of conservation subdivisions and environmentally sensitive design and, especially in the higher density Brandywine Community Center, incorporate best stormwater design practices to increase infiltration and reduce run-off volumes.

The subject property is located within the Environmental Strategy Area 3, which was formerly the Rural Tier. This proposal is for a new sand and gravel surface mining operation with woodland preservation of the on-site PMA. A conservation subdivision is not proposed, nor is the property within the Brandywine Town Center. The three on-site stream systems are unnamed tributaries to the North Branch of Mattawoman Creek. There are identified deposits of minerals (sand and gravel) on-site that are part of a larger mineral deposit area. The adjacent property is actively mined by the same owner and is identified as Gaslight I Wash Plant facility. The on-site woodlands that are not within the PMA are proposed to be removed to extract the mineral resources. All of the proposed development impacts will be outside of the environmentally sensitive areas except for one combined impact, to construct an elevated conveyor system and access road across an intermittent stream system. The remaining wooded REF will be preserved. The use of environmentally sensitive designs (sediment traps and basins) is proposed with the stormwater concept plan.

D. Chesapeake Bay Critical Area

 Enhance the County's Critical Area protection program in response to local, regional, and statewide initiatives and legislative changes.

The subject property is not located within the Chesapeake Bay Critical Area.

E. Air Quality and Greenhouse Gas Emissions

- Reduce air pollution through transportation demand management (TDM) projects and programs.
- Promote "climate-friendly" development patterns though planning processes and land use decisions.
- Increase awareness of the sources of air pollution and greenhouse gas emissions.

Air quality is a regional issue that is currently being addressed by the Council of Governments.

GREEN INFRASTRUCTURE PLAN

The 2017 Countywide Green Infrastructure Plan was approved with the adoption of the *Approved Prince George's County Resource Conservation Plan: A Countywide Functional Master Plan* (CR-11-2017) on March 7, 2017. According to the Green Infrastructure Plan this site does contain regulated and evaluation areas.

The following policies and strategies are applicable to the subject application. The text in **bold** is the text from the master plan and the plain text provides staff findings on plan conformance:

POLICY 1: Preserve, enhance, and restore the green infrastructure network and its ecological functions while supporting the desired development pattern of Plan Prince George's 2035.

- 1.1 Ensure that areas of connectivity and ecological functions are maintained, re-stored, and/or established by:
 - a. Using the designated green infrastructure network as a guide to decision-making and using it as an amenity in the site design and development review processes.
 - b. Protecting plant, fish, and wildlife habitats and maximizing the retention and/or restoration of the ecological potential of the landscape by prioritizing healthy, connected ecosystems for conservation.
 - c. Protecting existing resources when constructing stormwater management features and when providing mitigation for impacts.
 - d. Recognizing the ecosystem services provided by diverse land uses, such as woodlands, wetlands, meadows, urban forests, farms and grasslands within the green infrastructure network and work toward maintaining or restoring connections between these.
- 1.2 Ensure that Sensitive Species Project Review Areas and Special Conservation Areas (SCAs), and the critical ecological systems supporting them, are preserved, enhanced, connected, restored, and protected.
 - a. Identify critical ecological systems and ensure they are preserved and/or protected during the site design and development review processes.

The application area is not located within a sensitive species project review area or special conservation area. The nearest special conservation area is the Mattawoman stream valley system, located to the south. There are designated evaluation and regulated areas as defined in the Green Infrastructure Plan on the subject property. On-site REF such as three unnamed tributaries to North Branch Mattawoman Creek, associated stream buffers, nontidal wetlands, wetland buffer and 100-year floodplain were

identified on the approved NRI. The site is mostly wooded with open canopy areas within floodplain areas.

This mining application is required to restore the areas that are proposed for mining activities. The restoration measures include the filling, regrading, and replanting of the mining area once all mining activities have ceased. The on-site reforestation planting and preserved woodlands will be further protected when placed in a woodland and wildlife habitat conservation easement.

To further protect the existing REF during the proposed mining, SWM facilities will be reviewed by DPIE, the sediment and erosion control measures will be reviewed by the Prince George's County's Soil Conservation District, and the mining activities by MDE – Division of Minerals, Oils, and Gas.

POLICY 2: Support implementation of the 2017 GI Plan throughout the planning process.

2.4 Identify Network Gaps when reviewing land development applications and determine the best method to bridge the gap: preservation of existing forests, vegetation, and/or landscape features, and/or planting of a new corridor with reforestation, landscaping and/or street trees.

The application area does not contain network gap areas as the site is almost entirely wooded. The site will be restored upon conclusion of the mining operations.

2.5 Continue to require mitigation during the development review process for impacts to regulated environmental features, with preference given to locations on-site, within the same watershed as the development creating the impact, and within the green infrastructure network.

This mining application is required to restore the areas that are proposed for mining activities. These restoration effort areas include the proposed REF impact area. The applicant proposes to fully meet their woodland and reclamation requirement on-site with woodland preservation and reforestation plantings.

POLICY 3: Ensure public expenditures for staffing, programs, and infrastructure support the implementation of the 2017 GI Plan.

- 3.3 Design transportation systems to minimize fragmentation and maintain the ecological functioning of the green infrastructure network.
 - a. Provide wildlife and water-based fauna with safe passage under or across roads, sidewalks, and trails as appropriate. Consider the use of arched or bottomless culverts or bridges when existing structures are replaced, or new roads are constructed.

No fragmentation of REF by transportation systems is proposed with this SE. The proposed elevated conveyor system and access road will impact 0.80 acre of REF. Wildlife will still be able to move from woodland area to woodland area, across the proposed impact area. Woodland within the impact area will be replaced once the reclamation work is completed.

b. Locate trail systems outside the regulated environmental features and their buffers to the fullest extent possible. Where trails must be located within a regulated buffer, they must be designed to minimize clearing and grading and to use low impact surfaces.

No trail systems are proposed with this application.

POLICY 4: Provide the necessary tools for implementation of the 2017 GI Plan.

4.2 Continue to require the placement of conservation easements over areas of regulated environmental features, preserved or planted forests, appropriate portions of land contributing to Special Conservation Areas, and other lands containing sensitive features.

The proposed on-site preservation and reforestation areas will be placed in a woodland and wildlife habitat conservation easement at the conclusion of the mining activities. As part of the site's reclamation plan, the TCP2 proposes the entire site be reforested and, as a result the development, will meet their entire woodland conservation requirement all on-site. The property does not contain special conservation areas. The nearest special conservation area is located to the south and that is the Mattawoman stream valley system.

POLICY 5: Improve water quality through stream restoration, stormwater management, water resource protection, and strategic conservation of natural lands.

- 5.8 Limit the placement of stormwater structures within the boundaries of regulated environmental features and their buffers to outfall pipes or other features that cannot be located elsewhere.
- 5.9 Prioritize the preservation and replanting of vegetation along streams and wetlands to create and expand forested stream buffers to improve water quality.

The submitted plat of special exception site, landscape plan, and tree conservation plan shows sediment traps and basins as part of the reclamation efforts to control stormwater. The active mining of the application will be in four mining phases. Stormwater will be controlled during the active mining phase with several basins within the mining pit. No SWM structures during or after the mining activities will be within, or draining into, the on-site REF areas. All on-site REF areas will remain undisturbed other than the impacts proposed for the elevated conveyor and access road.

POLICY 7: Preserve, enhance, connect, restore, and preserve forest and tree canopy coverage.

General Strategies for Increasing Forest and Tree Canopy Coverage

- 7.1 Continue to maximize on-site woodland conservation and limit the use of off-site banking and the use of fee-in-lieu.
- 7.2 Protect, restore, and require the use of native plants. Prioritize the use of species with higher ecological values and plant species that are adaptable to climate change.
- 7.4 Ensure that trees that are preserved or planted are provided appropriate soils and adequate canopy and root space to continue growth and reach maturity. Where appropriate, ensure that soil treatments and/or amendments are used.

The proposed on-site preservation and reforestation area will be placed in a woodland and wildlife habitat conservation easement. As part of the site's reclamation plan, the TCP2 shows the entire mining limits reforested. With the addition of the woodland preservation, the development will meet their woodland conservation requirement entirely on-site. The landscaping materials and specifications and the tree canopy requirement details will be addressed at the time of permit review.

Forest Canopy Strategies

7.12 Discourage the creation of new forest edges by requiring edge treatments such as the planting of shade trees in areas where new forest edges are proposed to reduce the growth of invasive plants.

The application proposes woodland clearing for a subsurface mining operation. The mining area will be fully restored with reforestation plantings after the mining operations have ceased. No new forest edges will be created.

Natural Resource Inventory Plan/Existing Features

A Natural Resources Inventory NRI-133-2022 was approved on August 18, 2022, and provided with this application. The site contains 100-year floodplain, steep slopes, wetlands, streams, and their associated buffers, which comprise the PMA. There are 17 specimen trees scattered throughout the property. The TCP2 and the SE show all required information correctly, in conformance with the NRI. No revisions are required for conformance with the NRI.

Preservation of Regulated Environmental Features (REF)/Primary Management Area (PMA)

Section 27-317(a)(7) of the prior Zoning Ordinance states that the Prince George's County Planning Board may approve a special exception if it finds that the REF have been preserved and/or restored in a natural state, to the fullest extent possible, in accordance with the requirement of Section 24-130(b)(5) of the prior Subdivision Regulations. The on-site REF includes streams, 100-year floodplain, wetlands and associated buffers, and steep slopes.

Section 24-130(b)(5) of the prior Subdivision Regulations states: "Where a property is located outside the Chesapeake Bay Critical Areas Overlay Zones the preliminary plan and all plans associated with the subject application shall demonstrate the preservation and/or restoration of regulated environmental features in a natural state to the fullest extent possible consistent with the guidance provided by the Environmental Technical Manual established by Subtitle 25. Any lot with an impact shall demonstrate sufficient net lot area where a net lot area is required pursuant to Subtitle 27, for the reasonable development of the lot outside the regulated feature. All regulated environmental features shall be placed in a conservation easement and depicted on the final plat."

Impacts to REF should be limited to those that are necessary for the development of the property. Necessary impacts are those that are directly attributable to infrastructure required for the reasonable use, orderly, and efficient development of the subject property, or are those that are required by County Code for reasons of health, safety, or welfare. Necessary impacts include, but are not limited to, adequate sanitary sewerage lines and water lines, road crossings for required street connections, and outfalls for SWM facilities.

Road crossings of streams and/or wetlands may be appropriate if placed at the location of an existing crossing or at the point of least impact to REF. SWM outfalls may also be considered necessary if the site has been designed to place the outfall at the point of least impact. The types of impacts that should be avoided include those for site grading, building placement, parking, SWM facilities (not including outfalls), and road crossings, where reasonable alternatives exist. The cumulative impacts for the development of a property should be the fewest necessary and sufficient to reasonably develop the site in conformance with the County Code.

In this application, the proposed impact to PMA is for an elevated conveyor belt to transport mining product and for an access road to the mine. An SOJ was submitted with the application, dated August 21, 2024, and was updated on January 7, 2025 (still dated August 21, 2024), for the proposed impacts to the PMA.

PMA Impact Area	PMA (SF)	Stream Buffer (SF)	100-year Floodplain (SF)	Stream Bed (LF)	Steep slopes, Wetland, And Wetland Buffer (SF)
Conveyor and access road crossing	34,802	28,595.44	31,172	185	0
Total	34,802	28,595.44	31,172	185	0
	(0.80 Acres)	(0.66 Acres)	(0.72 Acres)	185	0

Statement of Justification

The SOJ includes a request to impact 0.80 acre (34,802 square feet) of on-site PMA, for construction of an elevated conveyor belt structure, to transport mining product. The proposed application is for a surface mining project which will not have any SWM outfall impacts. The proposed mining pit will be graded in a way that the pit will act as a stormwater pond. The requested PMA impact will be replanted as part of its reclamation plan and tree conservation plan.

The applicant has applied for a Joint Federal/State Application for the Alteration of Any Floodplain, Waterway, Tidal or Nontidal Wetland in Maryland with the MDE and Corps of Engineers (COE) for the wetland, and wetland buffer impacts. This application (24-NT-0188/202461254) was approved on October 9, 2024, and expires October 9, 2029. The approval allows for a temporary access road and an aggregate material conveyor for a sand and gravel mine.

- d. **Subdivision**—In a memorandum dated December 9, 2024 (Bartlett to Price), the Subdivision Section noted that there are no prior PPS or final plats approved for the subject property. In accordance with Section 24-107(c)(7)(B) of the prior Subdivision Regulations, and because the applicant is not proposing more than 5,000 square feet of gross floor area (GFA) with this SE application, this development is exempt from the requirement of filing a PPS or a final plat.
- e. **Historic Preservation**—In a memorandum dated October 15, 2024 (Stabler, Chisholm, Smith to Price), the Historic Preservation Section noted that there are six precontact indigenous sites but found that no additional archeological investigations are necessary.
- f. **Permit Review**—In a memorandum dated August 30, 2024 (Jacobs to Price), the Permit Review Section offered no comment.
- g. **Prince George's County Fire/EMS Department**—As of the writing of this technical staff report, the Fire/EMS Department did not offer any comments on this subject application.
- h. **Prince George's County Department of Permitting, Inspections and Enforcement (DPIE)**—In a memorandum dated October 1, 2024 (Guzman to Price), DPIE offered no objections to SE-22007.
- i. **Washington Suburban Sanitary Commission (WSSC)**—As of the writing of this technical staff report, WSSC did not offer any comments on this subject application.

VIII. COMMUNITY FEEDBACK

As of the writing of this technical staff report, no correspondence has been received from the surrounding community.

IX. RECOMMENDATION

Based on the applicant's statement of justification, the analysis contained in the technical staff report, associated referrals, and materials in the record, the applicant has demonstrated conformance with the required special exception findings, as set forth in the prior Prince George's County Zoning Ordinance. Staff find that the proposed application satisfies the requirements for approval, and that the application will be in conformance with the prior Zoning Ordinance requirements.

Therefore, staff recommend APPROVAL of Special Exception SE-22007, APPROVAL of a Variance from Section 25-122(b)(1)(G), and APPROVAL of Type 2 Tree Conservation Plan TCP2-033-2024, for Gas Light III Surface Mine, subject to the following conditions:

- 1. Prior to certification of the special exception site plan, the following revisions shall be made, or information shall be provided:
 - a. On Sheet 14, correct the Buffering Development from Special Roadways Schedule to 4.6-2.
 - b. Add a note to the coversheet stating that traffic to and from the site will be limited to employees and visitors to the site.
 - c. Provide shared lane markings and bicycle signage along the frontage of MD 373 (Accokeek Road) unless modified by the road operating agency with written correspondence in accordance with an applicable standard, code, or regulation.
 - d. On the coversheet, correct overlapping text ("PROP. PROTABLE CONVEYOR") obscuring the label for Parcel 21.
- 2. Prior to signature approval of the special exception plan the Type 2 tree conservation plan shall be revised as follows:
 - a. Add TCP2-033-2024 to the approval block, woodland conservation worksheet, and title block.
 - b. On Sheet 2 show the proposed woodland clearing width and distance of the proposed private entrance off MD 373 (Accokeek Road).
 - c. On all sheets label the proposed berms along MD 373 (Accokeek Road), and the proposed stormwater structures (riprap, inlet, and outfall structures).
 - d. Revise the primary management area conveyor crossing impact to match the area approved with Maryland Department of the Environment permit showing the access road in the same location.
 - e. On Sheet 11 of 17 add the missing word "conveyor" to the "exist. portable..." wording on Gaslight I property.
 - f. On Sheet 16 of 17 add a note below the planting schedule stating that reclamation planting will occur after all mining extraction and fine grading of mining area has been completed.
 - g. Have the revised plan signed and dated by the qualified professional preparing the plan.
- 3. Prior to signature approval of the special exception plan, a conservation easement shall be recorded in the Prince George's County Land Records in accordance with Section 25-122(d)(1)(B) of the County Code. The conservation easement shall be described by bearings, distances, and an exhibit. The conservation easement shall contain the delineated primary management area, except for approved impacts, and shall be reviewed by the Environmental Planning Section of the Development Review Division of the Prince George's County Planning Department prior to approval of the special exception plan. The following note shall be placed on the woodland conservation easement exhibit:

"Conservation easements described on this exhibit are areas where the installation of structures and roads and the removal of vegetation are prohibited without prior written consent from the M-NCPPC Planning Director or designee. The removal of hazardous trees, limbs, branches, or trunks is allowed."

4. Prior to certification of the special exception plan, a woodland conservation easement shall be recorded in the Prince George's County Land Records in accordance with Section 25-122(d)(1)(B). The woodland conservation easement shall be described by bearings, distances, and an exhibit. The woodland conservation easement shall contain the delineated woodland conservation threshold and shall be reviewed by the Environmental Planning Section of the Development Review Division of the Prince George's County Planning Department, prior to certification of the special exception plan. The following notes shall be placed on the woodland conservation easement exhibit:

"Conservation easements described on this exhibit are areas where the installation of structures and roads and the removal of vegetation are prohibited without prior written consent from the M-NCPPC Planning Director or designee. The removal of hazardous trees, limbs, branches, or trunks is allowed."

"This development is subject to restrictions shown on the approved Type 2 Tree Conservation Plan (TCP2-033-2024), or as modified by a future Type 2 Tree Conservation Plan and precludes any disturbance or installation of any structure within specific areas. Failure to comply will mean a violation of an approved Tree Conservation Plan and will make the owner subject to mitigation under the Woodland Conservation/Tree Preservation Policy."

5. Prior to the certification of the Type 2 tree conservation plan(TCP2) for this site, documents for the required woodland conservation easements shall be prepared and submitted to the Environmental Planning Section of the Development Review Division of the Prince George's County Planning Department for review by the Office of Law, and submission to the Prince George's County Land Records office for recordation, in accordance with Section 25-122(d)(1)(B). The following note shall be added to the standard Type 2 tree conservation plan notes on the plan as follows:

"Woodlands preserved, planted, or regenerated in fulfillment of woodland conservation requirements on-site have been placed in a woodland and wildlife habitat conservation easement recorded in the Prince George's County Land Records at Liber _____ Folio____. Revisions to this TCP2 may require a revision to the recorded easement."

- 6. Prior to certification of the special exception, the Site Development Concept Plan (DPIE 55642-2024-SDC) shall be revised to include a detail for the material to be used on the restricted access road beyond the MD 373 (Accokeek Road) apron are as required in Section 27-5402(jjj)(1)(H) of the Prince George's County Zoning Ordinance.
- 7. The hydrologic impact evaluation does not anticipate impacts to wells in the area; however, if the operation of the subject sand and gravel mine does impact the water

level in any wells within 0.25 mile of the subject mining site, as verified by Maryland Department of the Environment, corrective action shall be immediately taken by the applicant including, but not limited to, the drilling of a new well to replace the adversely affected well.

- 8. Mitigation of particulate matter emissions shall be accomplished by implementation of the following, in accordance with COMAR26.11.06.03(D):
 - a. The interior mining haul roads shall be maintained with a water truck or other approved dust control methods. No truck hauling is proposed on MD 373 (Accokeek Road).
 - b. Asphalt, oil, water, or suitable chemicals shall be applied on dirt roads, materials stockpiles, and other surfaces which can create airborne dust.
 - c. Open-bodied vehicles transporting materials shall be covered at all times when in motion.
- 9. In accordance with the air quality report provided with this application, and in compliance with Environmental Protection Agency requirements, all mobile equipment to be used on-site shall use ultra-low sulfur diesel fuel. The fuel supplier certification of the sulfur content of each fuel delivery shall be kept on-site for the duration of the special exception approval period.
- 10. Equipment fueling on-site shall be done in accordance with National Fire Protection Association NFPA 30 (NFPA 30), Flammable and Combustible Liquids Code, Chapter 2, and Chapter 3. The mobile fueling trucks shall be operated by trained personnel holding valid oil vehicle operator's certificates as required by COMAR 26.10.01.17. Care shall be taken to minimize spillage. Refueling shall take place as far from streams and wetlands as possible.
- 11. The following typical restrictions on mining operations, as provided in the applicant's statement of justification and as applied to previous mining approvals, shall be employed to reduce non-point/traffic generated noise impacts in the surrounding area:
 - a. Mining operations on-site are restricted to the hours allowed from 7:00 a.m. to 7:00 p.m. Monday through Friday and 7:00 a.m. to 4:00 p.m. on Saturdays, excluding federal holidays. There are no operations on Sundays.
 - b. The noise mitigation berms shall be located as shown on the plans submitted, to protect nearby residential buildings and properties. All berms shall be a minimum of 15 feet in height.
 - c. Trucks shall not use compression or "Jake" brakes both on-site and on the haul road.
 - d. Speeds on-site shall be restricted to 15 mph for all heavy vehicles.
 - e. All machinery shall be kept in good working order, especially mufflers, to ensure quiet operation.

- f. The volume of backup warning devices shall be minimized while still meeting Occupational Safety and Health Administration (OSHA) standards. OSHA standards require that the backup warning device must "be clearly audible in its operating environment." This allows the warning device to be turned down as long as it can be clearly heard in its environment.
- The applicant shall notify The Maryland-National Capital Park and Planning Commission (M-NCPPC), Environmental Planning Section, and Prince George's County Department of Permitting, Inspections and Enforcement (DPIE), prior to the start of reforestation for this mining operation and schedule a meeting with M-NCPPC and DPIE to address reforestation and woodland conservation issues, as required in the Environmental Technical Manual, Section 7.5.1A.
- 13. Prior to the start of work in any phase or portion thereof, the limits of disturbance for that phase or portion shall be staked on the ground or flagged on the existing trees. The applicant or their representative shall walk the limits of disturbance with an inspector of the Prince George's County Department of Permitting, Inspections, and Enforcement (DPIE), prior to the installation of sediment/erosion control measures and tree protective devices, as required in the Environmental Technical Manual Section 7.5.1C.
- 14. Prior to certification of the special exception, a copy of the approved sediment and erosion control plan shall be submitted, as required by Section 27-6805 of the Prince George's County Zoning Ordinance.
- 15. Prior to commencement of the mining operation, a special permit shall be obtained from Prince George's County Department of Permitting, Inspections and Enforcement (DPIE) to ensure compliance with the grading plan approved under Section 27-5402(jjj)(1)(C) of the Prince George's County Zoning Ordinance. The permit shall require the applicant to post a bond acceptable to the County Attorney, to secure its obligations pertaining to reforestation and landscaping, as required by this special exception.
- 16. The area to be mined shall be reclaimed in accordance with the Reclamation Plan by filling it with acceptable materials as required in the County's Zoning Code, Sections 32-156 and 32-157.



GAS LIGHT III SURFACE MINE

Special Exception

Case: SE-22007

Type 2 Tree Conservation Plan TCP2-033-2024

Staff Recommendation: APPROVAL with conditions

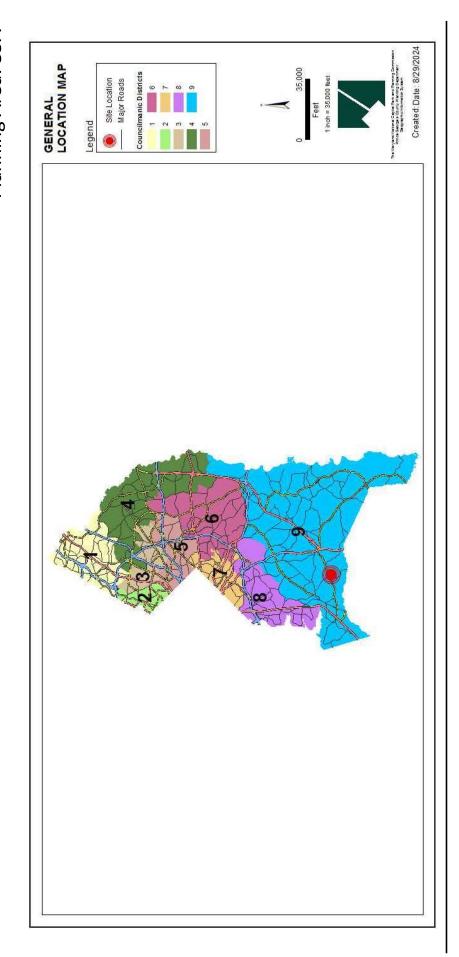


Slide 1 of 11 02/20/2025 Item: 4D

Case: SE-22007

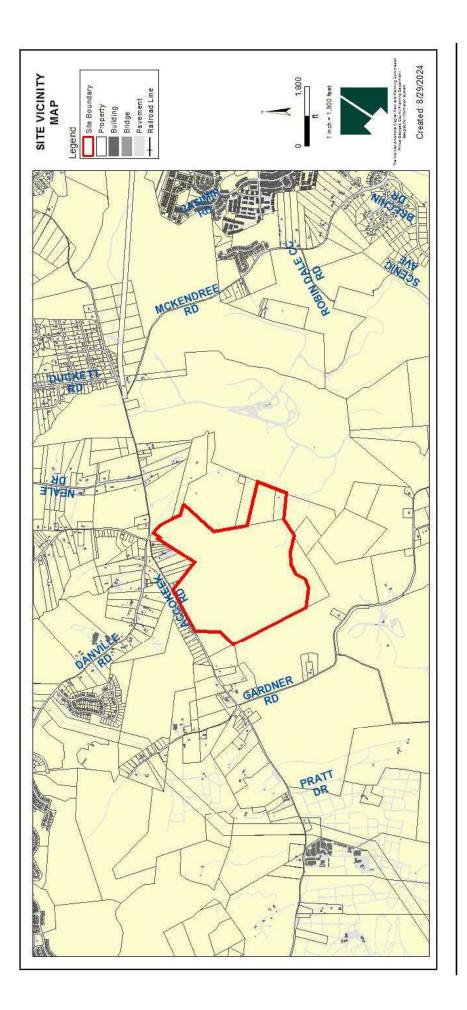
GENERAL LOCATION MAP

Council District: 09 Planning Area: 85A



Case: SE-22007

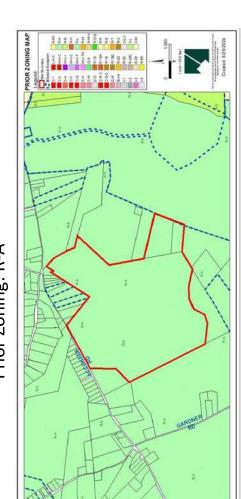
SITE VICINITY MAP



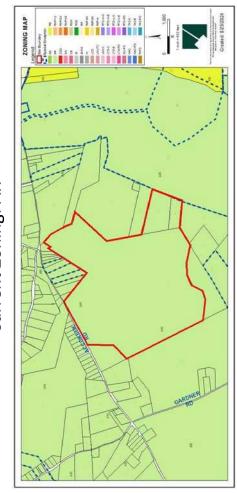
Case: SE-22007

ZONING MAP

Prior Zoning: R-A

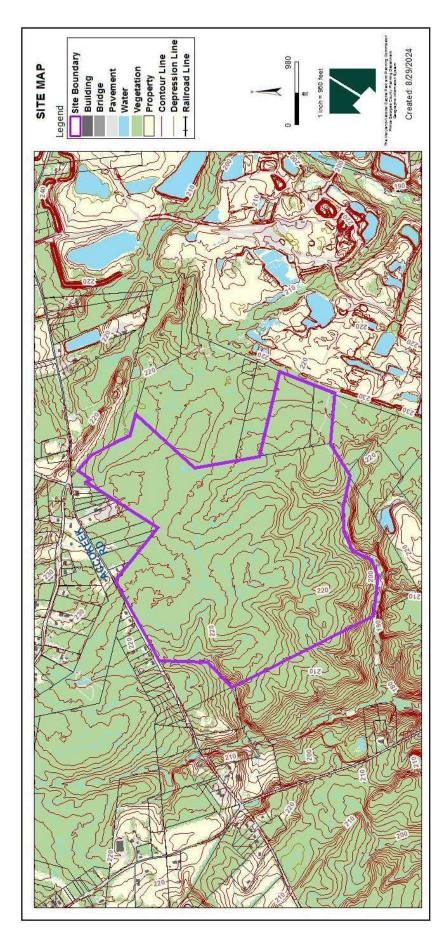


Current Zoning: AR

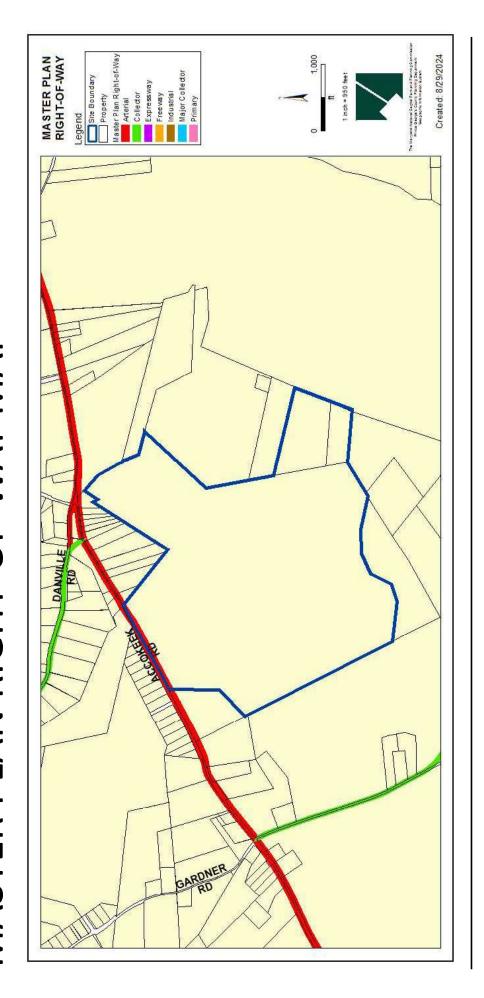


02/20/2025

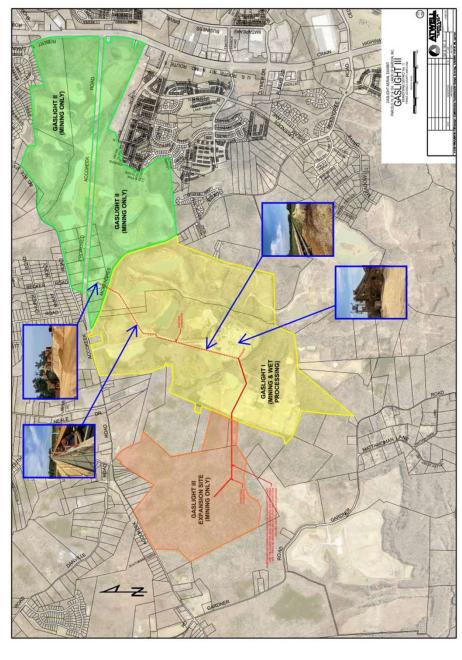
SITE MAP



Case: SE-22007 MASTER PLAN RIGHT-OF-WAY MAP

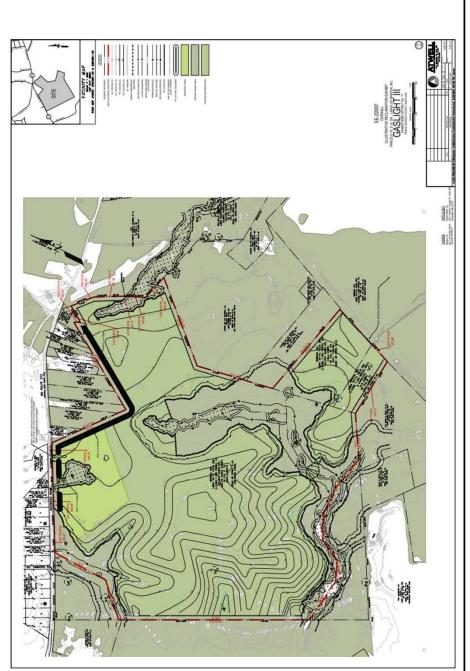


GASLIGHT AERIAL EXHIBIT

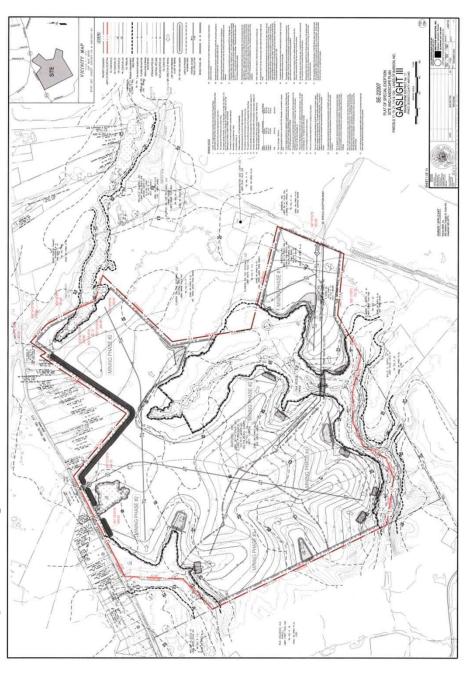


Slide 8 of 11

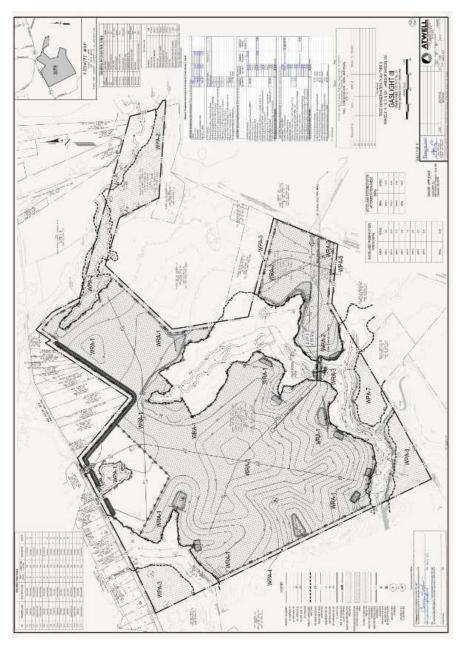
LLUSTRATIVE RECLAMATION EXHIBIT



SPECIAL EXCEPTION



TYPE 2 TREE CONSERVATION PLAN



STAFF RECOMMENDATION

APPROVAL with conditions

- Special Exception SE-22007
- Type 2 Tree Conservation Plan TCP2-033-2024

Applicant Required Mailings:

ssues:

None

- Informational Mailing: 02/19/2024
- Acceptance Mailing: 06/17/2024

Slide 11 of 11

AGENDA ITEM: 4D AGENDA DATE: 2/20/2025

STATEMENT OF JUSTIFICATION SPECIAL EXCEPTION APPLICATION SE-22007

APPLICANT: Holcim-MAR, Inc.

6401 Golden Triangle Drive

Suite 400

Greenbelt, Maryland 20770

OWNER: Bardon Inc.

6211 Ann Arbor Road Dundee, Michigan 48131

ATTORNEY/

CORRESPONDENT: Matthew C. Tedesco, Esq.

McNamee Hosea, P.A. 6404 Ivy Lane, Suite 820 Greenbelt, Maryland 20770 (301) 441-2420 Voice (301) 982-9450 Fax

MTedesco@mhlawyers.com

REQUEST: Amendment to Special Exception SE-4651 for the purpose of

expanding an existing surface mining operation of sand and gravel in accordance with Sections 27-317, 27-323 and 27-410 of the prior

Zoning Ordinance.

I. <u>DESCRIPTION OF PROPERTY</u>

1. Address / Location Located on the south side of Accokeek Road approximately

6,260 feet west of its intersection with McKendree Road.

2. Land Records Tax Map 153, Grids D-2, D-3, E-2, E-3, E-4, F-1, F-2, F-3 and

Reference F-4, Tax Map 154, Grid A-2

3. Subdivision N/A

4. Owner Bardon, Inc.

5. Total Site Area 328.02 Acres

6. Total S.E. Area 295.68 Acres

7. Proposed Use Surface Mining

8. Zoning AR (formerly R-A)

9. Zoning Map 219SE04, 219SE05, 220SE04 and 220SE05

10. Master Plan 2013 Approved Subregion 5 Master Plan and Sectional Map

Amendment.

11. Planning Area 85A – Brandywine

12. Councilmanic 9

District

13. Municipality None

14. Road Frontage 510± feet on Accokeek Road

15. Historic Sites None

II. NATURE OF REQUEST

The applicant is proposing to expand an existing surface mining operation which has a previously approved Special Exception (SE-4651). The applicant requests approval of an amendment to Special Exception SE-4651 for the purpose of expanding said existing surface mining operation in accordance with Sections 27-317, 27-323 and 27-410 of the Zoning Ordinance in existence prior to April 1, 2022 (the "prior Zoning Ordinance"). This application is being filed pursuant to Section 27-1704 of the Zoning Ordinance. Specifically, Section 27-1704(b) provides, among other things, that "[u]ntil and unless the period of time under which the development approval or permit remains valid expires. . ., the project may proceed to the next steps in the approval process (including any subdivision steps that may be necessary) and continue to be reviewed and decided under the Zoning Ordinance and Subdivision Regulations under which it was approved." Further, Section 27-1704(e) provides that "subsequent revisions or amendments to development approvals or permits 'grandfathered' under the provisions of this Section shall be reviewed and decided under the Zoning Ordinance under which the original development approval or permit was approved." Thus, and as explained below, this application, although requiring a new application number pursuant to Section 27-323(a), is really an expansion of SE-4651.

That is, the original surface mine was approved under SE-4402 by the District Council in 2002. In 2009, Aggregate Industries filed special exception SE-4651 to allow for a continuation of the original surface mining operation for another five years. That special exception was approved by the Zoning Hearing Examiner in 2010. Since that time, Aggregate Industries was acquired by the current applicant, Holcim-MAR, Inc.

Various portions of the 683.26 acres included in the area of existing SE-4651 have been mined and reclaimed while other areas are in various stages of mining. Ultimately, once all mining operations with SE-4651 are completed, the mined areas will be reclaimed in conformance with Condition 37 of SE-4651. The applicant now wishes to add approximately 328.02 acres to the surface mining operation, of which 230.45 acres are proposed to be utilized for active mining operations – effectively expanding the current on-site operations. The balance of the proposed additional property includes areas which will be preserved as floodplain, tree conservation, wetlands, and steep slopes with their attendant buffers, as well as areas that will be set aside for the construction of berms and buffers along the perimeter of the property to ensure appropriate screening.

As a matter of background, the applicant is also operating a wet processing facility on the

adjoining property pursuant to SE-4790 and another surface mine on an adjacent property to the east (pursuant to SE-4647), on which mining will be completed prior to the commencement of mining on the Subject Property.

It is proposed that the material extracted from the Subject Property will be washed at the wet processing facility located on the adjoining property, at the existing and operational wet processing facility approved in Special Exception SE-4790. Under this proposal, the material extracted from the Subject Property will be mechanically transported across the property line to the processing facility by means of a conveyor system, thus, negating any need for the raw material to be transported off-site by truck for processing. That is, from material extraction to the processing facility, the material will not have to be transported by truck off-site. The material will be transported off-site only after it has been washed at the wet processing facility. The wet processing facility will continue to be subject to the maximum number of vehicle trips associated with the approval of SE-4790, as controlled by condition of approval No. 2. As all materials from the proposed expansion under this application will pass through the existing wet processing facility, it can reasonably be understood that all vehicle trips associated with this proposed amendment to Special Exception SE-4651 will also be controlled by condition number 2 in SE-4790.

In the alternative, and assuming arguendo, this application can also be processed under the prior Zoning Ordinance pursuant to Section 27-1900 *et seq.* and CR-022-2024.

III. <u>SITE DESCRIPTION</u>

The subject property consists of a total of 328.02 acres in size and is irregular in shape. The property is zoned AR (formerly R-A) and is located on the south side of Accokeek Road approximately 6,260 feet west of its intersection with McKendree Road. The proposed mining operation of the site will be conducted by employees of Holcim-MAR, Inc., and will be conducted in four (4) phases as follows:

<u>PHASE</u>		<u>Limit of Disturbance</u>	<u>Limits of Mining</u>
Phase 1	-	29.28 Ac	29.28 Ac
Phase 2	-	123.77 Ac	123.77 Ac
Phase 3	-	40.07 Ac	40.07 Ac
Phase 4	-	37.33 Ac	37.33 Ac
Total		230.45 Ac	230.45 Ac

Each phase will be preceded by the installation of sediment and erosion controls and premining area preparation in accordance with County, State, and Federal regulations. These operations will be substantially similar to ongoing mining operations on the adjacent properties pursuant to prior special exception approvals.

IV. <u>NEIGHBORHOOD</u>

The Subject Property is located within Planning Area 85A in the Brandywine Planning Area as shown Map II-1 of the 2013 *Subregion 5 Approved Master Plan & Sectional Map Amendment*.

The Subject Property is surrounded by the following neighboring uses:

North: Accokeek Road and beyond, single-family homes in the AR (previously the

R-A) Zone.

South: Vacant land in the AR (previously the R-A) Zone and across Gardner Road is

a recycling facility in the AR (previously the R-A) Zone.

East: Wash Plant and vacant property in the R-A (AR) Zone.

West: Vacant land in the R-A (AR) Zone.

The neighborhood for this application is defined as following the same boundaries used for the southwestern one-half of Planning Area 85A as follows:

North: Accokeek Road (MD Route 373)

East: Robert S. Crain Highway (US. Route 301/ MD Route 5)

South: Charles County line (Mattawoman Creek)

West: Gardner Road

The neighborhood has a mixed character that transitions from a rural agricultural, consisting of vast tracts of forested land interspersed with actively used agricultural fields, transitioning to scattered single-family homes, and major single-family and townhouse developments located at its northern tip, as well as to the south. East of the Subject Property is the property on which the wet processing facility referenced above operates and to the northeast across McKendree Road the applicant is operating another sand and gravel mine approved under Special Exception SE-4647.

V. CONFORMANCE WITH THE APPLICABLE ZONING ORDINANCE

Evaluation of a special exception application is not an equation to be balanced with formulaic precision. (*See Sharp v. Howard County Bd. of Appeals*, 98 Md.App. 57, 73, 632 A.2d 248, 256 (1993) (rejecting "appellants' interpretation of the holding of Schultz as if it were the atomic chart of elements from which a formula for divining inherent and peculiar adverse effects could be derived"). Instead, a "special exception is a valid zoning mechanism that delegates to an administrative board a limited authority to permit enumerated uses which the legislative body has determined can, prima facie, properly be allowed in a specified use district, absent any fact or circumstance in a particular case which would change this presumptive finding." *People's Counsel v. Loyola College*, 406 Md. 54, 105-106 (2008) (internal citations omitted). Thus, there is a presumption that the proposed use is prima facie allowed.

Section 27-410. Surface mining.

Pursuant to Section 27-410 of the prior Zoning Ordinance, the Zoning Hearing Examiner must make specific findings applicable to sand and gravel surface mining operations, in order to

grant a Special Exception approval. This section sets forth the specific criteria required by Section 27-410 for the approval of a sand and gravel surface mining operation:

- (a) The surface mining of natural materials or deposits (including, sand, gravel, or clay pits; rock or stone quarries; and the removal of earth or topsoil) may be permitted, subject to the following:
 - (1) Heavy machinery may be used for the extraction of natural material or deposits from the site. Except in the I-2 Zone, heavy machinery may not be used for washing, refining or other processing, unless a Special Exception is granted for sand and gravel wet-processing under the provisions of Section 27-405;

COMMENT: The Subject Property is zoned AR (formerly R-A). Heavy machinery will only be utilized for the extraction of sand and gravel from the Subject Property on-site. Since the extracted material will be transported via an on-site conveyor system to the existing on-site wash plant located on an adjacent site operating pursuant to Special Exception SE-4790 – approved for wet processing, no heavy machinery will be used on-site for the washing, refining or other processing of mined materials.

(2) The use shall not be noxious, offensive, or otherwise objectionable by reason of dust, smoke, noise or vibration;

COMMENT: Measures have been designed into this proposal to assure that the use will not be noxious, offensive, or otherwise objectionable due to dust, smoke, noise, or vibration. All proposed buffer yards are designed according to those standards required to meet State of Maryland mining plan requirements (Title 26 Department of the Environment; Subtitle 21 Mining¹), or Prince George's County zoning regulations, whichever is more restrictive. In those perimeter areas where the Subject Property adjoins Accokeek Road, and parts of Parcels 17, 18, 22, 23, 112 and 114 (i.e., the Subject Property's north, east and west boundaries), the buffer yards are designed in accordance with the Prince George's County Landscape Manual. The 2010 Landscape Manual requires that for a "surface mining" use adjacent to a residential use, a type "D" buffer yard containing a forty (40) foot landscaped strip be provided. This buffer yard will be contained within the fifty (50) foot setback strip. Although this application is being filed pursuant to the Zoning Ordinance and Landscape Manual that existed prior to April 1, 2022, the provided buffers are otherwise in conformance with the existing (or new) Landscape Manual that requires a 50-foot E buffer.

Along this same northern and western boundaries of the Site, the fifty (50) foot setback strip will be further enhanced with the construction of additional approximately fifteen (15) foot high berms that are tailored to meet Federal and State noise abatement standards. The design of the berms are based on the specifications resulting from a noise impact and mitigation analysis (Report 23895B) prepared by Staiano Engineering, Inc. (SEI), a copy of which has been submitted to the Maryland-National Capital Park and Planning Commission (M-NCPPC) Staff for review. Based on the specifications contained within this noise impact analysis which is tailored to meet the noise

¹ Chapter 01 Surface Mining; Authority: Environment Article, §15-803 and 15-813; Natural Resources Article, §10-2A-06(c); Annotated Code of Maryland

abatement regulations of the State of Maryland (COMAR), the dimensions of the proposed berms will measure approximately fifteen (15) feet in height and sixty-four (64) feet in width at the base (with a four (4) foot top width), made of grass-covered earth, and will serve as both a sight and sound barrier for the surrounding roads from the mining operation. In those perimeter areas where the Subject Property adjoins Accokeek Road, McKendree Road and many of the perimeter areas adjoining other properties, the Applicant proposes to supplement the earthen screen berms with an additional fifty (50) foot wide vegetated setback strip. In those other perimeter areas where woodlands are present, the woodlands will be preserved within the fifty (50) foot wide setback strip. In those areas where there are no existing woodlands, the Applicant proposes to use supplemental plantings and Afforestation as a mechanism for replacing the vegetative cover.

Secondly, an evaluation of air quality impacts resulting from the proposed surface mining operation was prepared by Jenkins Environmental, Inc. (JEI), a copy of which will be submitted to the M-NCPPC Staff in a timely manner. Based on the analysis and conclusions contained within this analysis, the Applicant is proposing to employ the use of street sweepers and water trucks to promptly remove said debris from the road surface.

Third, under State Law (Land Use Article of the Annotated Code of Maryland), an Environmental Impact Report (EIR) must be prepared by the Maryland-National Capital Park and Planning Commission (M-NCPPC) whenever a request is made for a Special Exception to the zoning regulations for the mining of sand and gravel in Prince George's County. The law requires that the report evaluate such a zoning request comprehensively by determining the impact of the proposed mining activities on:

- (1) Noise;
- (2) Watershed and Water Quality;
- (3) Airshed and Air Quality;
- (4) Traffic and Traffic Safety;
- (5) Biological Resources including wetlands, woodlands and Tree Conservation Plan;
- (6) Any other environmental factors relating to the health, safety and welfare of the residents of the affected area.

The EIR is required to be prepared by the Natural Resources Division of the M-NCPPC. The Applicant will submit to the M-NCPPC Staff in a timely manner the required environmental data to support M-NCPPC's EIR showing the effects the proposed mining operation will have on predicted sound levels, noise, vibration, dust, or smoke, and traffic.

(3) The land areas exposed by the extraction and removal of natural materials or deposits shall be left suitable for development. A grading plan shall be submitted (along with the site plan) showing the existing and proposed ground elevations of the site, adjacent land, and all abutting streets. The exposed land area shall have a slope not greater than three to one (3:1), except where any portion of the site is developed for port or harbor facilities;

COMMENT: In keeping with the goals and objectives of the Master Plan and the General Plan, following the conclusion of the mining of this site, the property will be stabilized and reclaimed in

accordance with the standards defined in Prince George's County Woodlands Conservation Ordinance and will be left suitable for future development. The accompanying site plan for the expanded special exceptional area/use includes the proposed final grading for the property that illustrates the Applicant's compliance with the grading plan requirements of this section. Reclamation and stabilization efforts shall be staged as diligently as possible to follow the direction of mining, as shown on the site plans.

- (4) The Special Exception shall be valid for not longer than five (5) years, except where the use is located:
 - (A) In an R-R Zone which is predominantly undeveloped for a radius of one (1) mile from the operation; or
 - (B) In an I-2 zone;

COMMENT: The Appellate Court of Maryland held in *East Star, LLC v. Cnty. Comm'rs of Queen Anne's Cnty.*, 203 Md. App. 477, 38 A.3d 524 (2012) that a local regulations that place time periods on the operation of a sand and gravel mine are preempted by State law and, therefore, illegal. The Zoning Hearing Examiner has previously acknowledged this decision and did not place a time limit on SE-4647 or SE-4651.

(5) In addition to the requirements of Section 27-296(c), the site plan shall show an estimate of the time required for the removal of the material;

COMMENT: Notwithstanding the local jurisdictions inability to limit the time period for such uses, as the same is pre-empted by State law, the applicant anticipates that the extraction and removal of material from the site as will be approximately eight (8) years.

(6) At least sixty (60) calendar days prior to the hearing before the Zoning Hearing Examiner, the applicant shall file a traffic analysis with the Zoning Hearing Examiner for inclusion in the record, and shall send a copy to the Planning Board. The traffic analysis shall include the volume of traffic expected to be generated by the operation, and shall identify the streets to be used between the site and the nearest street (to be used) that has a minimum paved width of twenty-four (24) feet for the predominant length of the street;

COMMENT: A traffic analysis prepared by Lenhart Traffic in accordance with the standards of this section is being submitted with this application. Unlike normal mining operations, however, the Applicant is not proposing to ship the raw material via trucks over surrounding roadways. As noted previously in the discussion of Section 27-410 (a)(1) above, all materials that are mined from the Subject Property will be transported by means of a conveyor system to the existing wash plant located on the adjoining property to the east. The referenced wash plant property is operating pursuant to Special Exception SE-4790 where the final washing, processing, storage, and shipping operations will occur. Under this proposed application, the wash plant will continue to operate under the trip cap approved pursuant to SE-4790. Due to the nature of the mining operations proposed which eliminates the need for the transporting of either raw or processed materials to and from the Subject Property, the projected level of traffic generated by the proposed special exception will be

no greater than those volumes currently experienced from the combined operations of SE-4647 and SE-4790.

The trips expected to be generated from the subject surface mining operations are as follows:

- Employees (4 trips in/4trips out)
- Fuel Truck (1 trip in/1 trip out)
- Water Truck (4 trips in/4trips out)
- Site Manager (1 trip in/1 trip out)
- Safety/Environmental Manager (1 trip in/1 trip out)
- Service Vehicle/Special Equipment Vehicle (As needed)

Therefore, based on the data and analyses presented in the traffic study, the trips are expected to be minimal throughout the day, as well as the peak hour trips. The traffic impact study concludes that based on the traffic count data collected and the analysis conducted the proposed surface mining operation will have minimal traffic impacts to the surrounding area roadway system and that there is available capacity to accommodate the expected trips generated. There will be no truck traffic traveling to and from the site carrying mined raw or processed materials.

(7) Driveways or access points shall be identified on the site plan, and shall be located so as not to endanger pedestrians or create traffic hazards. The surface material to be used on the driveways shall be identified on the site plan. Any access driveway shall be at least twenty-two (22) feet wide, and shall be paved for a distance of at least two hundred (200) feet from the boundary line of the Special Exception.

COMMENT: The two proposed access point are clearly identified on the site plan. Signs will be posted 500 feet in advance of the driveway entrance, so that they will not create traffic hazards. One proposed point of entrance, along the south side of MD Route 373 (Accokeek Road), is located approximately 6,260 feet to the west of McKendree Road. The sight distance at the entrance point is over 500± feet in both the easterly and westerly directions on MD Route 373; and is, therefore, in accordance with established highway safety guidelines. The entrance from Accokeek Road will be paved to a width of twenty-two (22) feet, and it will have a paved length of approximately two hundred (200) feet as shown on the accompanying site plan. A second point of entrance proposes to connect to an existing access road on the adjoining property owned by Bardon, Inc. The site is located in a more sparsely developed area of Prince George's County with few if any pedestrians; therefore, the driveway entrance location should not endanger pedestrians.

(8) The Technical Staff Report prepared in response to the application shall include a current, Countywide inventory of the locations, dates of approval, and conditions of approval concerning haul routes and estimated loads per day for all approved and pending Special Exceptions for sand and gravel wet-processing, sanitary landfills and rubble fills, and surface mining, as indicated by the record in the case. The inventory shall also include the locations of all nonconforming sand and gravel wet-processing, sanitary landfills and rubble fills, and surface

mining operations throughout the County that were certified after September 6, 1974.

COMMENT: The Technical Staff Report has provided this inventory for these applications in the past, and it is assumed that they will do the same in this case.

(b) In the I-3 zone, the use shall be staged in conformance with the required Conceptual Site Plan. The District Council may require (as a condition of approval) that this use be terminated prior to a Detailed Site Plan being approved for another use included in the Conceptual Site Plan.

COMMENT: The Subject Property is in the R-A Zone, not the I-3 zone.

(c) In the M-A-C, L-A-C, E-I-A, R-U, R-M and R-S zones, no surface mining operation may be permitted after a Specific Design Plan for the subject property has been approved. An application for this Special Exception may only be accepted, and the Special Exception granted, if no Specific Design Plan has yet been filed for the subject property.

COMMENT: The Subject Property is not in any of these zoning categories.

(d) In reviewing the application, the District Council shall consider the use of techniques which provide for noise attenuation.

COMMENT: The primary element of this Special Exception Application that allows the proposal to achieve State and County noise abatement standards involve the use of a combination of vegetated buffer yards and the construction of sound abating berms. As noted in the Applicant's response the review criteria defined in section 27-410.(a)(2) above, for those perimeter areas where the Subject Property adjoins Accokeek Road and Parcels 17, 18, 22, 23, 112 and 114 (i.e., the Site's north and west boundaries), the buffer yards are designed in accordance with the Prince George's County Landscape. Along these same northern and western boundaries of the Site, a fifteen (15) foot high berm is proposed adjacent to the interior or inside boundary of the fifty (50) foot setback. The design of this berm is based on the specifications resulting from a noise impact and mitigation analysis prepared by SEI, that is designed in accordance with State of Maryland regulations promulgated to limit the amount of noise impacting residential land uses from various sources such as the proposed surface mine. The berm dimensions will measure fifteen (15) feet in height and sixty-four (64) feet in width at the base (with a four (4) foot top width), constructed of earth which will be stabilized using a grassy cover. The berms are designed to serve as a sight and sound barrier from the mining operation will be constructed of earth and stabilized using a grassy cover.

Secondly, as noted hereinabove and identified in the aforementioned noise impact and mitigation analysis prepared by SEI, only the equipment listed in the EIR shall be used on the site, and that all equipment shall be equipped with a Donaldson TCU05 muffler (or its equivalent of another manufacturer) that provides at least 30 dBA in noise abatement. Similar heavy equipment and machinery may be substituted as replacements are required, provided the noise generated by those vehicles comply with this sound reduction standard.

(e) On land which is located within a Chesapeake Bay Critical Area Overlay Zone,

no surface mining shall be located within:

- (1) Designated habitat protection areas as described in the Conservation Manual;
- (2) The Buffer area, as defined in the Conservation Manual;
- (3) Any area where the use would result in the substantial loss of long-range (twenty-five (25) years or more) productivity of forest and agriculture, or result in the degrading of water quality; or
- (4) An area containing highly erodible soils.

COMMENT: The Subject Property is not located within the Chesapeake Bay Critical Area Overlay Zone.

(f) In reviewing the application for compliance with the required findings set forth in Sections 27-317(a)(4) and 27-317(a)(5), the District Council shall consider the inventory required in Section 27-410(a)(8).

COMMENT: As will be demonstrated below, the application is in compliance with the required findings of Section 27-317. The applicant understands that the District Council will consider the inventory to be prepared by the technical staff in making its findings under Sections 27-317(a)(4) and (a)(5).

Section 27-317. Required findings.

In addition to the specific criteria set forth in Section 27-410, the proposed surface mining operation meets the criteria set forth in Section 27-317 of the Zoning Ordinance. Specifically:

- (a) A Special Exception may be approved if:
 - (1) The proposed use and site plan are in harmony with the purpose of this Subtitle;

COMMENT: The proposed sand and gravel mine is in harmony with the purposes of the prior Zoning Ordinance (Section 27-102.(a) of Subtitle 27), and the purposes of the R-A Zone (Section 27-426 of the Zoning Ordinance), as described below.

(2) The proposed use is in conformance with all the applicable requirements and regulations of this Subtitle;

COMMENT: As demonstrated by the Special Exception site plan and other documents filed herein, the proposed use is in conformance with all applicable requirements and regulations in accordance with Sections 27-317, 27-410, 27-445.02, and 27-625 of the Zoning Ordinance.

(3) The proposed use will not substantially impair the integrity of any validly approved Master Plan or Functional Master Plan, or, in the

absence of a Master Plan or Functional Master Plan, the General Plan;

COMMENT: The Applicant's proposed use is in conformance with the 2013 Subregion V Master Plan, and, therefore, will not substantially impair its integrity. The Master Plan recognizes that Prince George's County is the leader in sand and gravel resource in the State of Maryland. The Plan encourages extraction of the sand and gravel resources prior to permanent development.

This application ensures the extraction of available sand and gravel from the Subject Property prior to future development. The phasing of this project upon the cessation of sand and gravel extraction from the surface mining operations approved in SE-4647 assure a continuance in the supply of processed materials for use in the local construction and building industries, while ensuring that the surface mine's impact on neighboring properties and the environment will be minimized. Following the conclusion of the mining of this site, it will be reclaimed for residential development purposes, thereby encouraging the retention of valuable land resources for the future single-family detached residential subdivision lots. The proposed use further implement the Goals, Policies and Strategies of the Mineral Resources and Sand and Gravel sections of the Master Plan. The utilization of the subject property as a sand and gravel mine follows the orderly extraction of these mineral deposits from the site of SE-4002, SE-4651, and SE-4647, which are adjacent to the subject property. Furthermore, the conveyance and processing of the extracted material off-site via a conveyor system to the existing wash plant located on the site operating pursuant to SE-4403 indicate that the development of these mines is being phased, and planned so that the extraction of these deposits is taking place in an orderly manner.

The applicant has a proven history – supported by their prior, existing, and proposed mining operations – of being in compliance with all County, State, and Federal mining requirements. All areas that have been and are scheduled for mining are reclaimed to approximate original contours by filling with acceptable materials as described in Prince George's County Subtitle 4, Building Code, Section 4-303. Upon completion of the restoration process, the applicant proposes to continue restoring the previously mined areas to a condition that leaves them suitable for future development purposes.

This statement, along with the accompanying Site Plan and other documents filed herein, demonstrate that the proposed use is in conformance with all applicable requirements and regulations in accordance with Sections 27-317, 27-410, 27-445.02, and 27-625 of the Zoning Ordinance. The Site Plan is designed to reflect the recommendations and conclusions of various environmentally related studies performed by outside professional consultants tasked to assess the potential impact of this proposed surface mining operation. Based upon the influences of those studies and reports, the Special Exception Site Plan and application has been refined so to assure that it is in conformance with applicable Federal, State, and County laws and regulations relative to surface mining operations and potential adverse effects on adjacent land uses resulting from dust, noise, vibration, and traffic. Regarding the environmental policies of the Master Plan, the applicant offers the following.

A. Green Infrastructure

Policies

• Implement the master plan's desired development pattern while protecting sensitive environmental features and meeting the full intent of environmental policies and regulations.

- Ensure that new development incorporates open space, environmentally sensitive design, and mitigation activities.
- Protect, preserve, and enhance the identified green infrastructure network.

COMMENT: To ensure protections to the Mattawoman Creek and Piscataway Creek watersheds, as well as the environmental resources located in them, project design orientations have taken into consideration any known variables that may reduce or degrade these features. There are multiple areas of the Subject Property that will not be utilized and that will be put into conservation easements, ensuring that the natural resources in these areas will be protected in perpetuity. Best stormwater management practices have been designed to reduce sediment runoff, increase infiltration, and reduce run-off volumes.

B. Water Quality, Stormwater Management, and Groundwater Policies

- Encourage the restoration and enhancement of water quality in degraded areas and the preservation of water quality in areas not degraded.
- Protect and restore groundwater recharge areas such as wetlands and the headwater areas of streams.

COMMENT: It has been the goal of the applicant and the stormwater management design engineers to ensure that all water on site is managed in a way that will not degrade it further than the existing conditions. A majority of the surface flow is directed to sediment storage basins that have been strategically oriented to most efficiently capture and treat water before being discharged. This treated water will be able to continue supporting the existing environmental features.

C. Watersheds

Policies

- Ensure that, to the fullest extent possible, land use policies support the protection of the Mattawoman Creek and Piscataway Creek watersheds.
- Conserve as much land as possible, in the Rural Tier portion of the watershed, as natural resource land (forest, mineral, and agriculture).
- Minimize impervious surfaces in the Developing Tier portion of the watershed through use of conservation subdivisions and environmentally sensitive design and, especially in the higher density Brandywine Community Center, incorporate best stormwater design practices to increase infiltration and reduce run-off volumes.

COMMENT: To ensure protections to the Mattawoman Creek and Piscataway Creek watersheds, as well as the environmental resources located in them, project design orientations have taken into consideration any known variables that may reduce or degrade these features. There are multiple areas of the Subject Property that will not be utilized and that will be put into conservation easements, ensuring that the natural resources in these areas will be protected in perpetuity. Best stormwater management practices have been designed to reduce sediment runoff, increase infiltration, and reduce run-off volumes.

D. Chesapeake Bay Critical Area

• Enhance the County's Critical Area protection program in response to local, regional, and statewide initiatives and legislative changes.

COMMENT: Not applicable. The subject property is not located in the Chesapeake Critical Area.

E. Air Quality and Greenhouse Gas Emissions

- Reduce air pollution through transportation demand management (TDM) projects and programs.
- Promote "climate-friendly" development patterns through planning processes and land use decisions.
- Increase awareness of the sources of air pollution and greenhouse gas emissions.

COMMENT: As mentioned herein, under State Law (Land Use Article of the Annotated Code of Maryland), an Environmental Impact Report (EIR) must be prepared by the Maryland-National Capital Park and Planning Commission (M-NCPPC) whenever a request is made for a Special Exception to the zoning regulations for the mining of sand and gravel in Prince George's County. The law requires that the report evaluate such a zoning request comprehensively by determining the impact of the proposed mining activities on:

- (1) Noise;
- (2) Watershed and Water Quality;
- (3) Airshed and Air Quality;
- (4) Traffic and Traffic Safety;
- (5) Biological Resources including wetlands, woodlands and Tree Conservation Plan; and
- (6) Any other environmental factors relating to the health, safety and welfare of the residents of the affected area.

The EIR is required to be prepared by the Natural Resources Division of the M-NCPPC. The Applicant will submit to the M-NCPPC Staff in a timely manner the required environmental data to support M-NCPPC's EIR showing the effects the proposed mining operation will have on predicted sound levels, noise, vibration, dust, or smoke, and traffic. In addition, an evaluation of air quality impacts resulting from the proposed surface mining operation was prepared by Jenkins Environmental, Inc. (JEI), a copy of which will be submitted to the M-NCPPC Staff in a timely manner. Based on the analysis and conclusions contained within this analysis, the Applicant is proposing that interior haul roads will be sprayed with water, as necessary, to minimize the dust emissions created by vehicles working on the Subject Property. Secondly, should any dirt or debris find its way onto Accokeek Road, the Applicant proposes to employ the use of street sweepers and water trucks to promptly remove said debris from the road surface.

F. Green Building and Energy Efficiency

• Encourage the use of green building techniques that reduce resource and energy consumption.

COMMENT: Not applicable. This application does not propose any building construction.

G. Noise Intrusion

• Ensure that excessive noise-producing uses are not located near uses that are particularly sensitive to noise intrusion.

COMMENT: As noted herein, the proposed use meets or exceed the State and County requirements for noise and air pollution, protecting the safety of residents of the County while providing processed materials for use in local infrastructure projects that would promote the comfort, convenience, and welfare of present and future inhabitants of the County. The proposed mining operation will be conducted to meet or exceed all applicable laws and safety regulations of the Federal, State, and County Governments via the permit review process.

This mining operation will be an extension of, and will eventually replace the existing surface mining operation approved across McKendree Road (SE- 4647). The proposed mining operation will be conducted to meet or exceed all applicable laws and safety regulations of the County, State and Federal Governments via the permit review process. Therefore, the approval of this application will result in the orderly extraction of this necessary resource to serve the construction and building industries, thereby promoting the health, safety, morals, comfort, convenience, and welfare of inhabitants of the County. As noted herein the applicant's response to the review criteria defined in Section 27-410(a)(2), a fifty (50) foot wide minimum setback strip is proposed around the entire perimeter of the subject property that is designed according to those standards required to meet State of Maryland mining plan requirements, or Prince George's County zoning regulations, whichever is stricter. In those perimeter areas where the Subject Property adjoins Accokeek Road, McKendree Road, and parcels 17, 18, 22, 23, 112 and 114 (i.e., the Subject Property's north and west boundaries), a forty (40) foot wide type "D" buffer yard designed in accordance with the Prince George's County Landscape Manual is proposed for providing further screening between the proposed surface mining operation and neighboring residential properties. It is also revealed previously in this Statement of Justification (SOJ) that along the interior of this same north and west boundaries of the site identified above, fifteen (15) foot high screening berms are proposed. The berms are designed based on specifications developed in the noise impact and mitigation analysis prepared by SEI and tailored to meet the noise abatement regulations of the State of Maryland is proposed.

The combination of the fifty (50) foot setback, type "D" landscape buffer, and screening berms are designed to provide a sight and sound barrier for neighboring residential properties from the mining operation. Based on this visual assessment and supported by the recommendations and conclusions contained within the SEI noise impact study we can conclude that the adequate light, air, and privacy will be provided to neighboring and nearby properties. Following the conclusion of the mining of this site, the bulk of the property will be reclaimed in accordance with the standards defined in Prince George's County Woodlands Conservation Ordinance and will be left suitable for future development.

H. Sand and Gravel Mining

COMMENT: As provided in the Master Plan, state law, a comprehensive plan must incorporate land use policies and recommendations to balance mineral resource extraction with other land uses, and to prevent the preemption of mineral resource extraction by other uses. This resource provides an economic base for jobs, value-added services, and economic benefits." (Page 88). Mining

projects can have inherent adverse impacts, however, as provided herein, and as demonstrated in the reports and studies conducted for this use on the subject property, particularly related to noise, dust, and truck traffic, these impacts have been mitigated. The requested special exception does not substantially impair the integrity of the Master Plan or its policies/strategies related to the land use and development pattern and economic development. Indeed, the proposed and existing mining operation has been found (and will continue) to minimize impacts on scenic, historic, cultural, or recreational assets.

(4) The proposed use will not adversely affect the health, safety, or welfare of residents or workers in the area;

COMMENT: As noted in the Applicant's response to the purpose standard In Section 27-410(a)(2), the special exception site plan is designed to reflect the recommendations and conclusions of various environmentally related studies performed by outside professional consultants tasked to assess the potential impact of this proposed surface mining operation. Under State law (Land Use Article), an Environmental Impact Report (EIR) must be prepared by the M-NCPPC whenever a request is made for a Special Exception to the zoning regulations for the mining of sand and gravel in Prince George's County. The law requires that the report evaluate such a zoning request comprehensively by determining the impact of the proposed mining activities on: Noise, Watershed and Water Quality, Airshed and Air Quality, Traffic and Traffic Safety, Biological Resources including wetlands, woodlands and Tree Conservation Plan, and any other environmental factors relating to the health, safety and welfare of the residents and workers of the affected area. Based upon the influences of those studies and reports, the Special Exception Site Plan and application has been refined so to assure that the proposed mining operation is in conformance with applicable Federal, State, and County laws and regulations relative to surface mining operations.

The operational plan for the proposed mining operation is designed where all materials that are extracted from the Subject Property will be transported across the eastern property line by means of a conveyor system to the site of the wash plant operating pursuant to Special Exception SE-4790. All washing, processing, storage, and shipping said mined materials will be conducted under operations that are consistent with the conditions of approval approved for that special exception. The proposed use will not adversely affect the health, safety, or welfare of residents or workers in the area.

Measures are designed into this proposal to assure that the use will not be noxious, offensive, or otherwise objectionable due to dust, smoke, noise, or vibration. The proposed use will not introduce hazardous or noxious materials, impound water above existing elevations, or include structures that would represent a special hazard for fire and flood or would otherwise pose a catastrophic threat to adjacent properties or inhabitants of the County. All equipment fueling on-site shall be done in accordance with NFPA 30, Flammable and Combustible Liquids Code, Chapters 2 and 3. The mobile fueling trucks shall be operated by trained personnel holding valid Oil Vehicle Operator's Certificates as required by COMAR 26.10.01.17. Refueling shall take place as far from streams and wetlands as possible, and special care shall be taken to minimize spillage.

Interior haul roads will be sprayed with water, as necessary, to minimize the dust from vehicles working on the Subject Property. Following the conclusion of the mining and upon reclamation of this site, large portions of the property being held in a natural state for open space and tree conservation, providing large tracts of forest, and land that will be available for low-density

development. Consequently, the approval of this proposed use will not substantially impair the integrity of the 2013 Master Plan.

Finally, and as provided below, there is a presumption that while some inherent adverse impacts may exist, the legislature has previously examined those inherent impacts of the use, and determined, in this instance, the proposed use is permitted in the A-R Zone subject to a special exception and is presumptively compatible with other uses in the A-R Zone.

(5) The proposed use will not be detrimental to the use or development of adjacent properties or the general neighborhood; and

COMMENT: The requested special exception use or development will not be detrimental to adjacent properties or the neighborhood. As the Supreme Court of Maryland articulated in *Loyola*:

The local legislature, when it determines to adopt or amend the text of a zoning ordinance with regard to designating various uses as allowed only by special exception in various zones, considers in a generic sense that certain adverse effects, at least in type, potentially associated with (inherent to, if you will) these uses are likely to occur wherever in the particular zone they may be located. In that sense, the local legislature puts on its 'Sorting Hat' and separates permitted uses, special exceptions, and all other uses. That is why the uses are designated special exception uses, not permitted uses. The inherent effects notwithstanding, the legislative determination necessarily is that the uses conceptually are compatible in the particular zone with otherwise permitted uses and with surrounding zones and uses already in place, provided that, at a given location, adduced evidence does not convince the body to whom the power to grant or deny individual applications is given that actual incompatibility would occur.

Loyola, 406 Md. at 106 – 107. In this instance, and with the presumptive finding in mind, while some inherent adverse impacts may exist, the legislature has previously examined any inherent impacts of the uses, and determined, in this instance, that the proposed use in the A-R Zone is presumptively compatible with other uses in the A-R Zone, and by placing the property in the said zone, shares reciprocal benefits; thereby providing for coordinated, adjusted, and harmonious development of the Town, zoning district, and property. There is no evidence of incompatibility. Indeed, the use on the adjacent property in the same neighborhood has previously been determined to meet this standard in prior special exception approvals (to wit: SE-4647 or SE-4651).

Further, as noted herein in the Applicant's response to the review criteria defined in Section 27-102(a)(5), the combination of the fifty (50) foot setback, type "D" landscape buffer, and screening berms are designed to provide a sight and sound barrier for neighboring residential properties from the mining operation. Finally, it is worth noting that "[i]n determining which uses should be designated as permitted or conditional in a given use district, a legislative body considers the variety of possible uses available, examines the impact of the uses upon the various purposes of the zoning ordinance, determines which uses are compatible with each other and can share reciprocal benefits, and decides which uses will provide for coordinated, adjusted, and harmonious

development of the district." Schultz v. Pritts, 291 Md. 1, 20–21 (1981).

(6) The proposed site plan is in conformance with an approved Tree Conservation Plan.

COMMENT: As noted previously, following the conclusion of the mining of this site; the property will be stabilized and reclaimed in accordance with the standards defined in Prince George's County Woodlands Conservation Ordinance. A Type II Tree Conservation Plan (the case number has not yet been assigned) has been submitted and is being reviewed and expected to be approved by the Environmental Planning Section (EPS) of the M-NCPPC Planning Department as part of this Special Exception Application. In addition, the Applicant has submitted a Natural Resources Inventory or NRI that covers the entire site has as part of this application.

- (7) The proposed site plan demonstrates the preservation and/or restoration of the regulated environmental features in a natural state to the fullest extent possible.
- (b) In addition to the above required findings, in a Chesapeake Bay Critical Area Overlay Zone, a Special Exception shall not be granted:
 - (1) Where the existing lot coverage in the CBCA exceeds that allowed by this Subtitle, or
 - (2) Where granting the Special Exception would result in a net increase in the existing lot coverage in the CBCA.

The property that is the subject of this application consists of a total of 328.02 acres in size. Of the $328.02 \pm$ acres included in the special exception application, $230.45 \pm$ acres are proposed to be utilized for active mining operation. The balance of the property or approximately $97.57 \pm$ acres includes areas which will be preserved as floodplain, tree conservation, wetlands, steep slopes and their associated buffers and areas which will be set aside for the construction of berms and buffers along the perimeter of the property.

There is one (1) impact identified as being necessary for the development of this sand and gravel mining site and it relates to the conveyor crossing,

Section 27-102 - Purposes...

- (a) The purposes of the Zoning Ordinance are:
 - (1) To protect and promote the health, safety, morals comfort, convenience, and welfare of the present and future inhabitants of the County;

COMMENT: As noted herein, the proposed use meets the State and County requirements for noise and air pollution, protecting the safety of residents of the County while providing processed materials for use in local infrastructure projects that would promote the comfort, convenience, and welfare of present and future inhabitants of the County. The proposed mining operation will be conducted to meet or exceed all applicable laws and safety regulations of the Federal, State, and

County Governments via the permit review process.

This mining operation will be an extension of, and will eventually replace the existing surface mining operation approved across McKendree Road (SE- 4647). The proposed mining operation will be conducted to meet or exceed all applicable laws and safety regulations of the County, State and Federal Governments via the permit review process. Therefore, the approval of this application will result in the orderly extraction of this necessary resource to serve the construction and building industries, thereby promoting the health, safety, morals, comfort, convenience, and welfare of inhabitants of the County.

(2) To implement the General Plan, Area Master Plans, and Functional Master Plans;

COMMENT: The Subject Property is located within the area encompassed by the 2013 *Approved Subregion 5 Master Plan and Sectional Map Amendment*. The proposed use will implement the Goal and objectives of the Sand and Gravel section of the Master Plan (pp. 153 - 154), as described below:

Goal:

The County balances the need for the extraction of sand and gravel resources, and related activities, with the potential negative impact and nuisance to nearby properties and the environment, including restricting sand and gravel mining to the Rural Tier.

Strategies:

Explore the feasibility of developing a mineral overlay zone to protect mineral resources. Issues to be evaluated include:

- * Real estate notices
- * *Dispute resolutions*

Expand easement language in programs such as those run by the Maryland Agricultural Land Preservation Foundation (MALPF) to integrate sand and gravel operations within easement contracts.

Integrate the sand and gravel industry within traditional economic development programming such as tax credits and abatements, workforce assistance, and assistance with state and federal small business financing.

Conduct community outreach to improve understanding of the sand and gravel industry and to improve industry integration within the rural communities.

Ensure that sand and gravel mine applications address all impacts on surrounding communities, including requiring applicants to mitigate on and off-site transportation impacts from mining activities and potentially limiting the daily hours of mining activities and duration of sand and gravel approvals to mitigate the nuisance to nearby communities.

COMMENT: This basic philosophy of the 2013 Master Plan that promotes the protection of valuable mineral resources by recommending their extraction before permanent development of

those resource laden properties occur, has been recognized in master planning documents for Prince George's County for more than forty-nine (49) years. Starting with the Master Plan for Subregion V approved in 1974, then continuing with the 2013 Master Plan, the significance of the role of sand and gravel deposits in the construction industry has been clearly recognized.

The proposed sand and gravel mine is in harmony with the implementation of the 2013 Master Plan by adhering to the strategy of extracting the finite aggregate resource prior to the future development of the site. The development of the Subject Property as a sand and gravel mine follows the orderly extraction of these mineral deposits from the site of SE- 4647 located across McKendree Road to the west (also operated by Aggregate Industries, Inc.), indicating that the development of these mines is being phased, and planned so that the extraction of these deposits is taking place in an orderly manner.

(3) To promote the conservation, creation, and expansion of communities that will be developed with adequate public facilities and services;

COMMENT: The proposed use and ultimate development of the Subject Property will occur in a comprehensive and staged manner, taking into account the adequacy of public facilities and services and their impacts on adjacent communities. Reclamation plans are designed to enhance the environmental features such as drainage areas, steep slopes, woodlands, etc. and to prepare the site for the character and intensity of development as recommended by the 2013 Master Plan.

(4) To guide the orderly growth and development of the County, while recognizing the needs of agriculture, housing, industry, and business;

COMMENT: The proposed use will further this purpose to guide the orderly growth of the County. It will permit the mining of the Subject Property, producing a product which is a necessary raw material for public infrastructure and the building industry. Indirectly this will also contribute to the orderly growth and development of business and housing through the establishment of permanent conservation areas and the preparation of non-conservation areas for future development in accordance with the Goals and objectives of the 2013 Master Plan, and Subtitle 27.

(5) To provide adequate light, air, and privacy;

COMMENT: As noted hereinabove in the Applicant's response to the review criteria defined in Section 27-410(a)(2), a fifty (50) foot wide minimum setback strip is proposed around the entire perimeter of the subject property that is designed according to those standards required to meet State of Maryland mining plan requirements, or Prince George's County zoning regulations, whichever is stricter. In those perimeter areas where the Subject Property adjoins Accokeek Road, McKendree Road, and parcels 17, 18, 22, 23, 112 and 114 (i.e., the Subject Property's north and west boundaries), a forty (40) foot wide type "D" buffer yard designed in accordance with the Prince George's County Landscape Manual is proposed for providing further screening between the proposed surface mining operation and neighboring residential properties. It is also revealed previously in this Statement of Justification (SOJ) that along the interior of this same north and west boundaries of the site identified above, fifteen (15) foot high screening berms are proposed. The berms are designed based on specifications developed in the noise impact and mitigation analysis prepared by SEI and tailored to meet the noise abatement regulations of the State of Maryland is proposed.

The combination of the fifty (50) foot setback, type "D" landscape buffer, and screening berms are designed to provide a sight and sound barrier for neighboring residential properties from the mining operation. Based on this visual assessment and supported by the recommendations and conclusions contained within the SEI noise impact study we can conclude that the adequate light, air, and privacy will be provided to neighboring and nearby properties. Following the conclusion of the mining of this site, the bulk of the property will be reclaimed in accordance with the standards defined in Prince George's County Woodlands Conservation Ordinance and will be left suitable for future development.

(6) To promote the most beneficial relationship between the uses of land and buildings and protect landowners from adverse impacts of adjoining development;

COMMENT: This proposal will promote the most beneficial relationship between the uses of land and buildings and protect landowners from the adverse impact of adjoining development. As noted in the Applicant's response to Section 27-102(a).(5) above, fifteen (15) foot high by sixty-four (64) foot wide/deep earthen berms are proposed. These berms are proposed adjacent to large sections of the Subject Property perimeter areas where the Subject Property adjoins Accokeek Road, and parcels 17, 18, 22, 23, 112 and 114 (i.e., the Site's north and west boundaries, with the exception of the access point) as required to meet the noise abatement regulations of the State of Maryland. As noted previously, these berms are tailored to meet Federal and State noise abatement standards. In those perimeter areas where woodlands are present, the woodlands will be preserved within the fifty (50) foot wide setback strip. In those areas where there are no existing woodlands, the Applicant proposes to use supplemental plantings and Afforestation as a mechanism for enhancing the existing vegetative cover.

(7) To protect the County from fire, flood, panic, and other dangers;

COMMENT: This proposal will not result in the creation of a dangerous situation as it will meet all applicable safety regulations of the County, State, and Federal governments by means of the permit review process. No mining will occur within the 100-year floodplains, the fifty (50) foot wide stream and floodplain buffers, or the twenty-five (25) foot wide wetlands buffer. The internal access roads that will connect the various phases of the operation were located to minimize environmental disturbances to the extent possible. The applicant is proposing to impact a stream located on the property to allow the installation of its conveyor system. The proposed use will not introduce hazardous or noxious materials, impound water above existing elevations, or include structures that would represent a special hazard for fire and flood or would otherwise pose a catastrophic threat to adjacent properties or inhabitants of the County.

(8) To provide sound, sanitary housing in a suitable and healthy living environment within the economic reach of all County residents;

COMMENT: This proposal is for the establishment of a sand and gravel mine, which is a necessary raw material for both public infrastructure and the building industry. As such, it will provide the public and the building industry with the raw materials necessary for the construction and maintenance of sound, sanitary housing, contributing towards a suitable and healthy living environment served by adequate public infrastructure that will be within the economic reach of all

County residents even though the proposed use does not include the development of housing or other dwellings. The proposed use is in accordance with restrictions on disturbance to environmentally sensitive areas and thus provides a platform for future development in a healthy living environment.

(9) To encourage economic development activities that provide desirable employment and a broad, protected tax base;

COMMENT: The proposed use will contribute to the tax base by providing opportunities for steady employment that can be projected to continue for at least the period of the in which mining will occur at this site. In addition to providing employment, the proposal will also contribute to the tax base through the sales tax generated therein.

(10) To prevent the overcrowding of land;

COMMENT: This proposal will not overcrowd the land. There are no buildings proposed on the site plan and the use is only temporary.

(11) To lessen the danger and congestion of traffic on the streets, and to insure the continued usefulness of all elements of the transportation system for their planned functions;

COMMENT: This proposal will lessen the danger of traffic on the streets through the provision of a twenty-two (22) feet wide driveway entrance to serve the limited employee activity only, and street signage announcing the driveway entrance a minimum of five-hundred (500) feet in advance. As part of the access permit process, the entrance design proposed on Accokeek Road (MD Route 373), will require the review and approval by the State Highway Administration (SHA) in accordance with the regulations of the SHA.

As noted previously in the Applicant's response to Section 27-410 (a)(1) above, all materials that are mined from the Subject Property will be mechanically transported across the eastern property line by means of a conveyor system which is included as part of this application, to the wet processing facility approved for that purpose pursuant to Special Exception SE-4790. Due to the nature of the proposed mining operations which eliminate the need for the transporting of either raw or processed materials to and from the Subject Property, the projected level of traffic generated by the proposed special exception will only be from employees and is expected to be no greater than those volumes currently experienced from the combined operations of SE- 4790 and SE- 4647.

Finally, as stated previously in this SOJ, the applicant has submitted a copy of the Traffic Analysis with this application.

(12) To insure the social and economic stability of all parts of the County;

COMMENT: The proposed use promotes social and economic stability by providing a local source of aggregates to support construction activities and following the conclusion of the mining of this site, the bulk of the property will be reclaimed and left suitable for future development in keeping with the goals and objectives of the Master Plan. Further, Prince George's

County is a leading aggregate resource in the State, and the extraction and sale of this resource provides a significant economic benefit to the County.

(13) To protect against undue noise, and air and water pollution, and to encourage the preservation of stream valleys, steep slopes, lands of natural beauty, dense forests, scenic vistas, and other similar features;

COMMENT: Prior to the commencement of the mining operations, sediment and erosion control plans will be reviewed and approved by the Federal, State, and County Governments via the permit review process. During the course of the four phases identified in this special exception mining operation, it is estimated that seven (7) sediment control traps, basins and other sediment control devices will be employed to protect undisturbed areas, including adjacent properties, from sediment run-off. Additionally, no mining will occur within any fifty (50) foot wide stream buffers, or twenty-five (25) foot wide wetland buffers. The internal access roads that will connect the various phases of the operation were located to minimize environmental disturbances to the extent possible.

As noted previously in this SOJ, measures have been designed into this proposal to assure that the use will not be noxious, offensive, or otherwise objectionable due to dust, smoke, noise, or vibration. The Site Plan for this Special Exception proposes that a minimum fifty (50) foot wide setback strip be provided around the entire perimeter of the subject property. All proposed buffer yards are designed according to those standards required to meet State of Maryland mining plan requirements (Title 26 Department of the Environment; Subtitle 21 Mining), or Prince George's County zoning regulations, whichever is more restrictive. Dependent upon the particular location around the perimeter of the site and the potential noise impacts projected to potentially affect the various neighboring properties, a combination of screening, buffering, and earthen berm noise abatement techniques are being proposed based on the design criteria of the County's Landscape Manual and those recommendations and conclusions contained within the PNV noise impact study.

An evaluation of air quality impacts resulting from the proposed surface mining operation was prepared by Jenkins Environmental, Inc. (JEI), a copy of which will be submitted to the M-NCPPC Staff in a timely manner. Based on the analysis and conclusions contained within this analysis, the Applicant is proposing that interior haul roads will be sprayed with water, as necessary, to minimize the dust emissions created by vehicles working on the Subject Property. Secondly, should any dirt or debris find its way onto Accokeek Road, the Applicant proposes to employ the use of street sweepers and water trucks to promptly remove said debris from the road surface.

Under State Law (Article 28, Section 8-110), an Environmental Impact Report (EIR) must be prepared by the M-NCPPC whenever a request is made for a Special Exception to the zoning regulations for the mining of sand and gravel in Prince George's County. The law requires that the report evaluate such a zoning request comprehensively by determining the impact of the proposed mining activities on: on Noise, Watershed and Water Quality, Airshed and Air Quality, Traffic and Traffic Safety, Biological Resources including wetlands, woodlands and Tree Conservation Plan, and any other environmental factors relating to the health, safety and welfare of the residents and workers of the affected area.

Following the conclusion of the mining of this site, and in keeping with the goals and objectives of the Master Plan, all sediment control traps, basins and devises will be removed and the property will be stabilized. Following the reclamation process, large portions of the property will be held, upon reclamation, in a natural state for open space and tree conservation, providing large tracts

of forest, and land that will be available for low-density development and contributing to the scenic beauty of the County.

(14) To provide open space to protect scenic beauty and natural features of the County, as well as to provide recreational space; and

COMMENT: This portion of MD Route 373 (Accokeek Road) from Bealle Hill Road to MD Route 5 (Branch Avenue) is designated as a Historic Road by the 2013 *Approved Subregion 5 Master Plan and Sectional Map Amendment*. Historically, this road led southeast from the Lower Chapel at Accokeek to the four-road intersection (later known as T.B.) was in use by 1739; it was described as Road #5:13 in the 1828 Scenic Road Survey. For roadways to be classified as Historic Roadways they typically maintain the alignment of the early road maps and surveys of Prince George's County. Although Accokeek Road may still follow its historic alignment as it passes the subject property, the road is improved as a secondary State highway constructed with open shoulders and drainage swales that is capable of supporting 2008 average daily traffic volumes of around 4,150± vehicles² traveling at medium highway speeds (i.e., 40 MPH as it passes the subject property). Furthermore, a review of the 1993 Subregion V Master Plan designates Accokeek Road (MD Rte. 373) from proposed designated road project A-55 to C-522 (proposed MD Rte. 5 interchange) as project C-527 and recommends that this section of roadway be upgraded with improvements that encompass 4 lanes constructed on a proposed 80-foot right-of-way.

The proposed sand and gravel mining operations and subsequent reclamation plans will have no impact on the historicity of this roadway. The reclamation plans for the property are designed to enhance the environmental features such as drainage areas, steep slopes, and woodlands. Following the conclusion of the mining of this site, and in keeping with the goals and objectives of the Master Plan, the property will be stabilized, with large portions of the property being held in a natural state for open space and tree conservation and will be left suitable for future development.

(15) To protect and conserve the agricultural industry and natural resources.

COMMENT: This proposal, by allowing for the orderly extraction of sand and gravel (natural resources) at this time, conserves these resources in the sense that they are used, rather than wasted, which would be the case if the land were to be developed prior to their removal. Further, as the site will be restored and then used for future development purposes, this proposal will result in the conservation of those undisturbed and protected floodplains, streams, wetlands, and woodland areas that were previously protected by this proposed use.

Section 27-426. - R-A Zone (Residential-Agricultural).

(a) Purposes.

(1) The purposes of the R-A Zone are:

² The Maryland Traffic Volume Maps depict the Annual Average Daily Traffic (AADT) at various locations on Maryland's roadways by county. Traffic Volume data is collected from over 3000 program count stations and 79 ATR's, located throughout Maryland. The State Highway Administration website show AADT volumes of between 10,241 north of the property near the US 301 intersection, and 4,341 south of the property at the Croom Road intersection.

(A) To provide for large-lot one-family detached residential subdivisions, while encouraging the retention of agriculture as a primary land use;

COMMENT: Following the conclusion of the mining of this site, and in keeping with the goals and objectives of the 2013 Master Plan, the bulk the property will be held upon reclamation for future development, thereby encouraging the retention of valuable land resources for the future single-family detached residential subdivision lots.

(B) To encourage the preservation of trees and open spaces; and

COMMENT: The proposed uses are consistent with the goals and objectives of Prince George's County's Master Plans and General Plan and protect natural resources by limiting proposed disturbance within environmentally sensitive areas and installing and maintaining sediment control and storm water management facilities that reduce degradation of stream channels and limit sedimentation of receiving waters. This proposal will encourage the preservation of trees and open spaces. Much of the buffer areas will consist of woodland preservation, as will essentially all of the wooded floodplain, wetlands, and associated buffers. Additionally, no mining will occur within the 100-year floodplains, the fifty (50) foot wide stream and floodplain buffers, or the twenty-five (25) foot wide wetlands buffer. Following the conclusion of the mining of this site, it will be reclaimed for residential development purposes, thereby encouraging the retention of valuable land resources for the future single-family detached residential subdivision lots.

(C) To prevent soil erosion and stream valley flooding.

COMMENT: The proposed mining operation will prevent soil erosion and stream valley flooding through the use of approved sediment control measures. Each phase will be preceded by the installation of sediment and erosion controls and pre-mining area preparation in accordance with the sediment and erosion control regulations of the County, State, and Federal governments by means of the permit review process.

Sec. 27-445.02. Surface mining; sand and gravel wet-processing.

Section 27-445.02 of the Zoning Ordinance specifically governs surface mining; sand and gravel wet-processing. The applicable requirements of Section 27.445.02 (c) are as follows:

- (a) In order for any surface mining or sand and gravel wet-processing operation to continue, the requirements of this Section shall be met.
- (b) The purposes of this Section are to prevent or control the detrimental effects of surface mining and sand and gravel wet-processing operations upon neighboring properties, and existing and proposed land uses in the general area.
- (c) All surface mining and sand and gravel wet-processing operations shall meet the following requirements:

(1) The uses shall be operated in full compliance with applicable extraction and surface mining or sand and gravel wet-processing regulations;

COMMENT: This proposal will not result in the creation of a dangerous situation as it will meet all applicable safety, stormwater management, sediment and erosion control regulations of the County, State, and Federal governments by means of the permit review process. No mining will occur within any 100-year floodplains, seventy-five (75) foot wide stream and floodplain buffers, or twenty-five (25) foot wide wetland buffers. The internal access roads that will connect the various phases of the operation were located to minimize environmental disturbances to the extent possible. The proposed use will not introduce hazardous or noxious materials, impound water above existing elevations, or include structures that would represent a special hazard for fire and flood or would otherwise pose a catastrophic threat to adjacent properties or inhabitants of the County. Utilization of the existing (and previously approved) conveyor system will also facilitate the ability for materials to be conveyed to the processing facility interior to the adject site, which further reduces truck utilization for the overall operation of the facility.

Limits of disturbance lines and vegetative buffers shown on all the submitted and approved plans shall be maintained at all times during the mining operation. Topsoil shall be stockpiled within the limits of disturbance for use during the reclamation period for each phase. Stockpiled topsoil and overburden material shall be seeded with quick-growing grasses to minimize the wash-off of silt into streams within the site. The proposed mining operation will be conducted to meet or exceed all applicable laws and safety regulations of the Federal, State, and County Governments via the permit review process.

(2) For the safety of residents and property, the operator of the facility shall take effective measures to control the speed of trucks utilizing his facility and neighboring streets;

COMMENT: With the prior approvals, the Applicant implemented two measures to control the speed of trucks utilizing their facility and neighboring streets. The speed of trucks on the interior haul roads of the facility is limited to 15 miles per hour or less. Signs are posted along all access road and at each exit advising the truck drivers of the posted speed limits on intersecting public rights of ways. Furthermore, due to the nature of the operation and the previously approved special exceptions that included the ability to convey materials across McKendree Road by means of a conveyor system to the site of the existing (and approved) wash plant operating pursuant to SE-4403 – where the final washing, processing, storage, and shipping operations occur, the daily or peak period vehicle trips originating from the subject property is extremely limited.

(3) The operator shall avoid depositing any debris upon any existing streets; and

COMMENT: Although based on the data and analyses presented in the traffic study, the trips are expected to be minimal throughout the day, as well as the peak hour trips, the applicant proposes that in compliance with this requirement, interior haul roads will be sprayed with water, as necessary, to minimize the dust from vehicles working on the Subject Property. Secondly, should any dirt or debris find its way onto the public right of way, the applicant proposes to employ the use of street sweepers and water trucks to promptly remove said debris from the road surface. These measures

are currently in place and operational for the existing use and have proven to be successful in ensuring that debris is not deposited upon any existing streets.

(4) The owner of the subject property shall be required to post and maintain a permanent, durable sign identifying the use as a surface mining or sand and gravel wet-processing operation, in accordance with the requirements of Section 27-629.

COMMENT: The applicant has previously posted and maintained a sign at the main entrance onto the site that identifies the use of the Subject Property as a surface mining operation. The reference to Section 27-629 appears to be in error. Rather, the applicable section governing signs for surface mining are contained in Section 27-625, which were addressed with SE-4647, and further below.

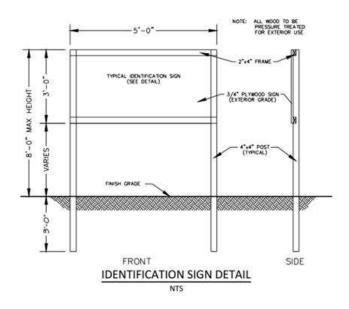
- (d) On land which is located within a Chesapeake Bay Critical Area Overlay Zone, surface mining, sand and gravel wet-processing, or wash plants, including ponds, spoil sites, and equipment, are prohibited within the Buffer, as defined in the Conservation Manual. In addition, no surface mining or sand and gravel wet-processing shall be located within:
 - (1) Designated habitat protection areas, as described in the Conservation Manual;
 - (2) The Buffer area, as defined in the Conservation Manual;
 - (3) Any area where the use would result in the substantial loss of long-range (twenty-five (25) years or more) productivity of forest and agriculture, or result in a degrading of water quality; or
 - (4) An area containing highly erodible soils.

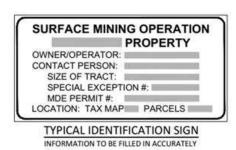
COMMENT: Not applicable. The subject property is not located within the Chesapeake Bay Critical Area Overlay Zone.

Section 27-625. Surface mining; sand and gravel wet-processing identification.

- (a) Area.
 - (1) Not less than 9, nor more than 16, square feet.

COMMENT: The sign proposed by the Applicant will be in accordance with this criterion, please refer to the detail of the sign on the special exception site plan, which includes the following:





(b) Location.

(1) All signs shall be conspicuous and legible.

COMMENT: The sign proposed by the Applicant will be in accordance with this criterion, please refer to the Special Exception Site and Landscape Plan for further details on location.

(c) Quantity.

- (1) If the property has frontage on one (1) or more improved public streets, there shall be one sign posted for each one thousand (1,000) feet (or fraction) of street frontage on each street.
- (2) If the property does not have frontage on an improved public street, there shall be one (1) sign posted within the right-of-way or easement which provides vehicular access to the property.

COMMENT: The subject property has approximately 2,313± feet of street frontage on Accokeek Road. The Applicant proposes to post one sign fifteen (15) square feet in area adjacent to the proposed entrance onto the property, as shown on the Special Exception Site and Landscape Plan.

(d) Height.

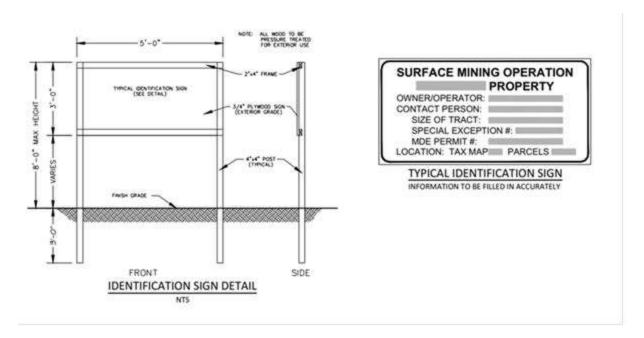
(1) Not less than four (4), nor more than eight (8), feet above the finished grade of the improved street if it is to be viewed from a public street.

COMMENT: The sign proposed by the Applicant will be in accordance with this criterion, refer to the Special Exception Site and Landscape Plan for further details.

(e) Contents.

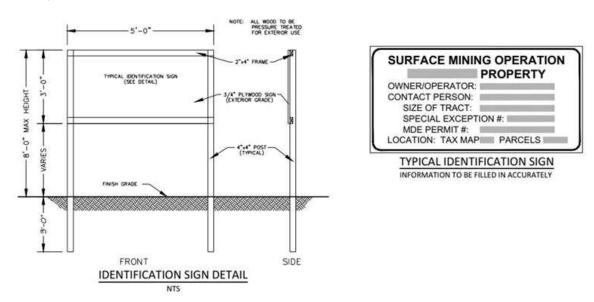
- (1) Each sign shall contain the following information:
 - (A) Identification of the use as a surface mining or sand and gravel wet-processing operation;

COMMENT: The sign proposed by the Applicant will be in accordance with this criterion, refer to the Special Exception Site and Landscape Plan for further details. (As depicted below):



(B) Size of the property (in acres);

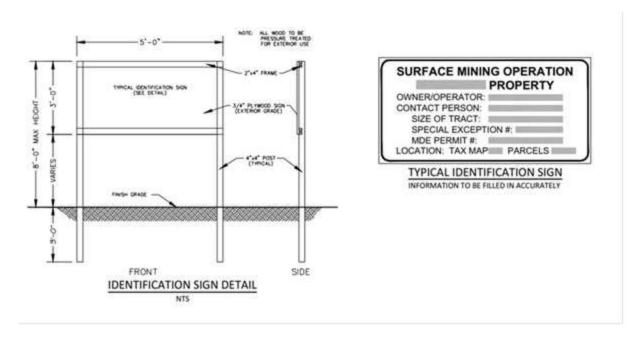
COMMENT: The sign proposed by the Applicant will be in accordance with this criterion, refer to the Special Exception Site and Landscape Plan for further details. (As depicted below):



(C) Name of the owner of the property and operator of the facility;

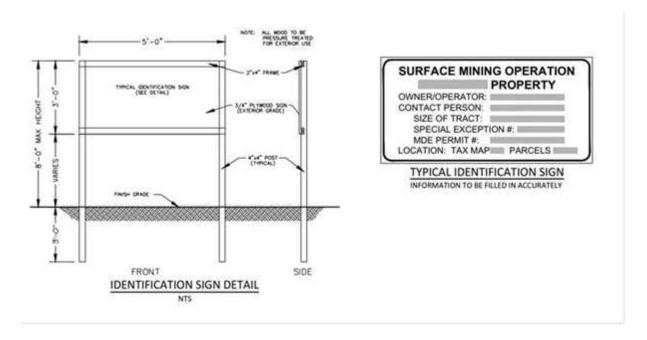
COMMENT: The sign proposed by the Applicant will be in accordance with this criterion, refer

to the Special Exception Site and Landscape Plan for further details. (As depicted below):



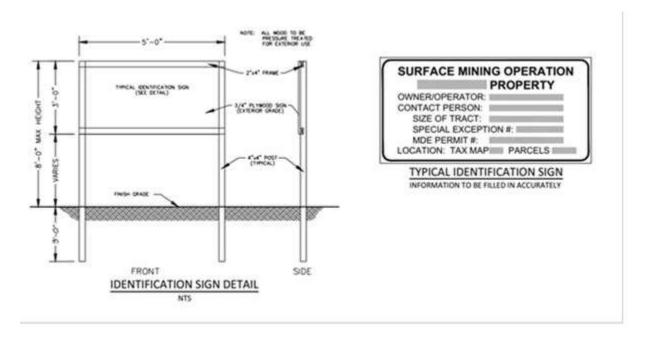
(D) A legal description of the property, including the subdivision name, lot and block numbers, or liber and folio numbers; and

COMMENT: The sign proposed by the Applicant will be in accordance with this criterion, refer to the Special Exception Site and Landscape Plan for further details. (As depicted below):



(E) Instructions for obtaining additional information about the operation.

COMMENT: The sign proposed by the Applicant will be in accordance with this criterion, refer to the Special Exception Site and Landscape Plan for further details. (As depicted below):



VI. <u>CONCLUSION</u>

As demonstrated by the Statement of Justification, the accompanying Site Plan, and other documents filed herein, the proposed use is in conformance with all applicable requirements and regulations in accordance with Sections 27-317, 27-410, 27-445.02, and 27-625 of the prior Zoning Ordinance. The proposed sand and gravel mine is in harmony with the implementation of the 2013 Master Plan by adhering to the strategy of extracting finite aggregate resource prior to the future development of the site. The approval of this special exception will help to ensure that there will be an adequate supply of sand and gravel for the metropolitan area for the next decade.

The Site Plan is designed to reflect the recommendations and conclusions of various environmentally related studies performed by outside professional consultants tasked to assess the potential impact of this proposed surface mining operation. Based upon the influences of those studies and reports, the Special Exception Site Plan and application has been refined so to assure that it is in conformance with applicable Federal, State, and County laws and regulations relative to surface mining operations. Measures have been designed into this proposal to assure that the use will not be noxious, offensive, or otherwise objectionable due to dust, smoke, noise, or vibration.

In addition, a traffic analysis was prepared by Lenhart Traffic Consulting, Inc.. in accordance with the scoping guidelines of the County as directed by the M-NCPPC Staff. Unlike normal mining operations, the Applicant is not proposing to ship the raw material via hauling trucks over surrounding roadways. As noted previously in Section 27-410 (a)(1) above, all materials that are mined from the Subject Property will be transported by means of an on-site conveyor system to the existing wash plant located on the adjacent property to the east of the subject property. The

referenced wash plant property is operating subject to a trip cap pursuant to its special exception—where the final washing, processing, storage, and shipping operations will occur. Under this proposed application, the wash plant will continue to operate under the trip cap approved pursuant to SE-4403. Due to the nature of the mining operations proposed which eliminates the need for the transporting of either raw or processed materials to and from the Subject Property, the projected level of traffic generated by the proposed special exception will be no greater than those volumes currently experienced from the combined operations of SE-4790 and SE-4647.

Finally, following the conclusion of the mining activities and stabilization of the property, and keeping with the goals and objectives of the Master Plan, large portions of the property will be held, upon reclamation, in a natural state for open space and tree conservation, providing large tracts of forest, and land that will be available for low-density development.

In conclusion, it is respectfully submitted that this application merit approval as it is in conformance with the 2013 Master Plan and is in accordance with all the applicable requirements of the Prince George's County Zoning Ordinance in existence prior to April 1, 2022.

Respectfully submitted,

McNamee Hosea, P.A.

By:

Matthew C. Tedesco

Attorney for the Applicant

Date: March 28, 2024

(First Pre-Review Submittal)

April 30, 2024 (Second Submittal)

1616 McCormick Drive, Largo, MD 20774 • pgplanning.org • Maryland Relay 7-1-1

Countywide Planning Division Environmental Planning Section

301-952-3650

January 7, 2025

MEMORANDUM

TO: Todd Price, Planner III, Zoning Section, DRD

VIA: Tom Burke, Supervisor, Environmental Planning Section, CWPD

FROM: Chuck Schneider, Planner III, Environmental Planning Section, CWPD

SUBJECT: Gas Light III Surface Mine; SE-22007 and TCP2-033-2024

The Environmental Planning Section (EPS) has reviewed the above referenced Special Exception (SE-22007) and Type 2 Tree Conservation Plan (TCP2-033-2024) stamped as received on June 28, 2024. Comments were provided in a Subdivision and Development Review Committee (SDRC) meeting on August 16, 2024. Revised information was emailed to the EPS in September, October, November, and December of 2024. The Environmental Planning Section recommends approval of SE-22007 and TCP2-033-2024 based on the findings and conditions listed at the end of this memorandum.

BACKGROUND

Review Case #	Associated Tree Conservation Plan #	Authority	Status	Action Date	Resolution Number
NRI-133-2022	N/A	Staff	Approved	8/18/2022	N/A
SE-22007	TCP2-033-2024	Planning Board	Pending	Pending	Pending

PROPOSED ACTIVITY

The applicant is requesting approval of a Special Exception (SE-22007) and a Type 2 Tree Conservation Plan (TCP2-033-2024) for the expansion of an existing surfacing mining operation.

The TCP2 shows the proposed mass grading of the site; woodland preservation and the preservation of regulated environmental features (REF); sediment basins; an elevated conveyor belt system that will transport the mining material from the application area to the adjacent property with an existing surface mining operation; and reforestation plantings of all the proposed on-site woodland clearing areas.

APPLICABLE WOODLAND CONSERVATION ORDINANCE

The project is subject to the environmental regulations contained in prior Subtitles 24, 25, and 27, and the 2010 Woodland Conservation Ordinance, because the development is subject to a Special Exception plan that was accepted for review prior to July 1, 2024.

SITE DESCRIPTION

The 351.29-acre property is located on the southside of Accokeek Road, west of its intersection with McKendree Road.

The current zoning for the site is Agricultural-Residential (AR); however, the applicant has opted to apply the zoning standards to this application that were in effect prior to April 1, 2022, for the Residential-Agricultural (R-A) Zones. The property is over 99.5 percent wooded with canopy openings within the onsite 100-year floodplain areas of the site. From a review of available information, and as shown on the approved natural resources inventory (NRI), regulated environmental features (REF) are located on-site such as primary management area (PMA) which includes two streams (unnamed tributaries to the North Branch of Mattawoman Creek), 100-foot stream buffers, nontidal wetlands, 25-foot wetland buffer, and 100-year floodplain. The site does not contain any Wetlands of Special State Concern, as mapped by the Maryland Department of Natural Resources (DNR). The County's Department of the Environment (DOE) watershed map shows the site is within Mattawoman Creek watershed of the Potomac River basin. The site features undeveloped lands that slope and drain toward the two on-site stream systems. The DNR identifies the site as being within a stronghold watershed area (small area adjacent to Accokeek Road) and within a Tier II catchment area. The northwest corner of the site adjacent to Accokeek Road is identified within the Mount Vernon Viewshed of Primary Concern. According to available information from the Maryland Department of Natural Resources Natural Heritage Program, no rare, threatened, and endangered species are known to be on-site or on adjacent properties. The site is located within the Rural and Agricultural Areas of the 2025 Growth Policy and Generalized Future Land Use Maps.

REVIEW OF PREVIOUSLY APPROVED CONDITIONS

The application area has no previous development review applications and no environmental conditions.

MASTER PLAN CONFORMANCE

Plan Prince George's 2035 Approved General Plan (2014)

The site is located within the Environmental Strategy Area 3 of the Regulated Environmental Protection Areas Map, and is in the Rural and Agricultural Area of the General Plan Growth Policy Map as designated by *Plan Prince George's* 2035 *Approved General Plan* (Plan 2035). The property is located within a priority preservation area. This area contains subsurface minerals that need to be extracted to be used for building materials. The General Plan states that priority preservation areas include areas that contain productive agricultural or forest soils; or are capable of supporting profitable agricultural and forestry enterprises where productive soils are lacking. This application area plans on harvesting the on-site woodlands within the mining area, extracting the valuable materials, restoring and replanting the mining areas, and placing the existing and proposed woodlands within a protective woodland conservation easement.

Subregion 5 Master Plan and Sectional Map Amendment Section V: Environment

The site is located within *Approved Subregion 5 Master Plan and Sectional Map Amendment* (July 2013). In the Approved Master Plan and Sectional Map Amendment, the section on Environment contains eight (8) sections (A-H), each of which contain policies and strategies. The text in **bold** is the policy text from the master plan and the plain text provides comments on plan conformance.

A. Green Infrastructure

- Implement the master plan's desired development pattern while protecting sensitive environmental features and meeting the full intent of environmental policies and regulations.

- Ensure the new development incorporates open space, environmental sensitive design, and mitigation activities.
- Protect, preserve, and enhance the identified green infrastructure network.

The application area is not within a Master Plan Special Conservation Area; however, the on-site stream systems are part of the North Branch of the Mattawoman Creek which eventually flows into the Mattawoman Creek. The main branch of Mattawoman Creek is identified as a Special Conservation Area. The site contains mapped Regulated Area within the 2017 *Countywide Green Infrastructure Plan* (GI Plan) along the stream systems. The woodland adjacent to the Regulated Areas is mapped as Evaluation Area within the GI Plan. These areas are the highest priority for preservation of REF and woodland.

The 2010 Woodland and Wildlife Habitat Conservation Ordinance (WCO) requires priority be placed on the preservation and planting of floodplain, wetlands, and stream corridors, and emphasizes the preservation of large contiguous woodland within the green infrastructure network. The site contains mapped Forest Interior Dwelling Species habitat (FIDS), which is an additional high priority for preservation and enhancement of on-site woodland.

The mining application proposes to remove all on-site woodland areas except for the woodlands within the PMA and along Accokeek Road. There is identified mineral product (sand and gravel) below the surface of the application area. One PMA impact area for the construction of an elevated conveyor system and access road is proposed in the southeast corner of the site. At the end of the mining extraction process, the applicant is required to reclaim, regrade, and replant the site to the former natural conditions. The woodland conservation worksheet on the TCP2 shows the removal of 226.86 acres of woodland in the net tract area, and the removal of 0.58 acre of woodland within the floodplain, resulting in a woodland conservation requirement of 263.00 acres. According to the worksheet, the requirement is proposed to be met with 57.59 acres of woodland preservation on-site and 205.41 acres of reforestation on-site. All of the woodland conservation requirements will be met on-site with on-site preservation and reforestation plantings. The NRI has identified 17 specimen trees on-site, and this application requests the removal of four specimen trees.

Impacts to the REF are limited to those required or only necessary for development, such as one elevated conveyor system and access road impact.

B. Water Quality, Stormwater Management, and Groundwater

- Encourage the restoration and enhancement of water quality in degraded areas and the preservation of water quality in areas not degraded.
- Protect and restore groundwater recharge areas such as wetlands and the headwater areas of streams.

The special exception application is for new surface mining area which is reviewed by several state and local government agencies for stormwater management. All mining activities are reviewed by the Maryland Department of the Environment (MDE) - Minerals, Oils, and Gas Division. The areas outside the mining activity are reviewed by the Prince George's County Department of Permits, Inspections and Enforcement (DPIE).

The submitted TCP2 and Plat of Special Exception Site and Landscape Plan show the proposed sediment basins and traps for the on-site reclamation efforts. Active surface mining controls stormwater within the actual mining excavation pit. Stormwater is directed towards the pit where sediment can be filtered through the existing mineral deposits. The stormwater outside the excavation area will flow towards the existing drainage pattern.

The applicant has submitted an unapproved "DPIE 55642-2024-SDC Site Development Concept Plan" with this application that is in review with DPIE. The submitted plan is for the construction of the employee and visitor entrance road off Accokeek Road. No wetlands or streams impacts are associated with the proposed access road.

The application proposes one temporary elevated conveyor and access road crossing, which will impact an intermittent stream system, stream buffer, and PMA. This proposed impact area was approved by the MDE-Nontidal Wetland Division. The remaining on-site streams, wetland, associated buffer, and 100-year floodplain are proposed for preservation with this application.

C. Watersheds

- Ensure that, to the fullest extent possible, land use policies support the protection of the Mattawoman Creek and Piscataway Creek watersheds.
- Conserve as much land as possible, in the Rural Tier portion of the watershed, as natural resource land (forest, mineral, and agriculture).
- Minimize impervious surfaces in the Developing Tier portion of the watershed through use of conservation subdivisions and environmentally sensitive design and, especially in the higher density Brandywine Community Center, incorporate best stormwater design practices to increase infiltration and reduce run-off volumes.

The subject property is located within the Environmental Strategy Area 3, which was formerly the rural tier. This proposal is for a new sand and gravel surface mining operation with woodland preservation of the on-site PMA. A conservation subdivision is not proposed nor is the property within the Brandywine Town Center. The three on-site stream systems are unnamed tributaries to the North Branch of Mattawoman Creek. There are identified deposits of minerals (sand and gravel) on-site that are part of a larger mineral deposit area. The adjacent property is actively mined by the same owner and is identified as Gaslight I Wash Plant facility. The onsite woodlands that are not within the PMA are proposed to be removed to extract the mineral resources. All of the proposed development impacts will be outside the environmentally sensitive areas except for one combined impact to construct an elevated conveyor system and access road across an intermittent stream system. The remaining wooded REF will be preserved. The use of environmentally sensitive designs (sediment traps and basins) is proposed with the stormwater concept plan.

D. Chesapeake Bay Critical Area

- Enhance the County's Critical Area protection program in response to local, regional, and statewide initiatives and legislative changes.

The subject property is not located within the Chesapeake Bay Critical Area.

- E. Air Quality and Greenhouse Gas Emissions
 - Reduce air pollution through transportation demand management (TDM) projects and programs.
 - Promote "climate-friendly" development patterns though planning processes and land use decisions.
 - Increase awareness of the sources of air pollution and greenhouse gas emissions.

Air quality is a regional issue that is currently being addressed by the Council of Governments.

GREEN INFRASTRUCTURE PLAN

The 2017 Countywide Green Infrastructure Plan was approved with the adoption of the Approved Resource Conservation Plan: A Countywide Functional Master Plan (CR-11-2017) on March 7, 2017. According to the Plan this site does contain Regulated and Evaluation Areas.

The following policies and strategies are applicable to the subject application. The text in **BOLD** is the text from the master plan and the plain text provides staff findings on plan conformance:

- POLICY 1: Preserve, enhance, and restore the green infrastructure network and its ecological functions while supporting the desired development pattern of Plan Prince George's 2035.
 - 1.1 Ensure that areas of connectivity and ecological functions are maintained, re-stored, and/or established by:
 - a. Using the designated green infrastructure network as a guide to decision-making and using it as an amenity in the site design and development review processes.
 - b. Protecting plant, fish, and wildlife habitats and maximizing the retention and/or restoration of the ecological potential of the landscape by prioritizing healthy, connected ecosystems for conservation.
 - c. Protecting existing resources when constructing stormwater management features and when providing mitigation for impacts.
 - d. Recognizing the ecosystem services provided by diverse land uses, such as woodlands, wetlands, meadows, urban forests, farms and grasslands within the green infrastructure network and work toward maintaining or restoring connections between these.
 - 1.2 Ensure that Sensitive Species Project Review Areas and Special Conservation Areas (SCAs), and the critical ecological systems supporting them, are preserved, enhanced, connected, restored, and protected.
 - a. Identify critical ecological systems and ensure they are preserved and/or protected during the site design and development review processes.

The application area is not located within a Sensitive Species Project Review Area or Special Conservation Area. The nearest Special Conservation Area is the Mattawoman stream valley system, located to the south. There are designated Evaluation and Regulated Areas as defined in the Green Infrastructure Plan on the subject property. On-site REF such as three unnamed tributaries to North Branch Mattawoman Creek, associated stream buffers, nontidal wetlands, wetland buffer and 100-year floodplain were identified on the approved NRI. The site is mostly wooded with open canopy areas within floodplain areas.

This mining application is required to restore the areas that are proposed for mining activities. The restoration measures include the filling, re-grading, and replanting the mining area once all mining activities have ceased. The on-site reforestation planting and preserved woodlands will be further protected when placed in a woodland and wildlife habitat conservation easement.

To further protect the existing REF during the proposed mining, stormwater management facilities will be reviewed by the DPIE, the sediment and erosion control measures will be reviewed by the Prince George's County's Soil Conservation District, and the mining activities by the Maryland Department of the Environment – Division of Minerals, Oils, and Gas.

POLICY 2: Support implementation of the 2017 GI Plan throughout the planning process.

2.4 Identify Network Gaps when reviewing land development applications and determine the best method to bridge the gap: preservation of existing forests, vegetation, and/or landscape features, and/ or planting of a new corridor with reforestation, landscaping and/or street trees.

The application area does not contain Network Gap areas as the site is almost entirely wooded. The site will be restored upon conclusion of the mining operations.

2.5 Continue to require mitigation during the development review process for impacts to regulated environmental features, with preference given to locations on-site, within the same watershed as the development creating the impact, and within the green infrastructure network.

This mining application is required to restore the areas that are proposed for mining activities. These restoration effort areas include the proposed REF impact area. The applicant proposes to fully meet their woodland and reclamation requirement on-site with woodland preservation and reforestation plantings.

POLICY 3: Ensure public expenditures for staffing, programs, and infrastructure support the implementation of the 2017 GI Plan.

- 3.3 Design transportation systems to minimize fragmentation and maintain the ecological functioning of the green infrastructure network.
- a. Provide wildlife and water-based fauna with safe passage under or across roads, sidewalks, and trails as appropriate. Consider the use of arched or bottomless culverts or bridges when existing structures are replaced, or new roads are constructed.

No fragmentation of regulated environmental features (REF) by transportation systems is proposed with this SE. The proposed elevated conveyor system and access road will impact 0.80 acre of REF. Wildlife will still be able move from woodland area to woodland area across the proposed impact area. Woodland within the impact area will be replaced once the reclamation work is completed.

b. Locate trail systems outside the regulated environmental features and their buffers to the fullest extent possible. Where trails must be located within a regulated buffer, they must be designed to minimize clearing and grading and to use low impact surfaces.

No trail systems are proposed with this application.

POLICY 4: Provide the necessary tools for implementation of the 2017 GI Plan.

4.2 Continue to require the placement of conservation easements over areas of regulated environmental features, preserved or planted forests, appropriate portions of land contributing to Special Conservation Areas, and other lands containing sensitive features.

The proposed on-site preservation and reforestation areas will be placed in a woodland and wildlife habitat conservation easement at the conclusion of the mining activities. As part of the site's reclamation plan, the TCP2 proposes the entire site be reforested and as a result the development will meet their entire woodland conservation requirement all on-site. The property does not contain Special Conservation Areas. The nearest Special Conservation Area is located to the south and that is the Mattawoman stream valley system.

- POLICY 5: Improve water quality through stream restoration, stormwater management, water resource protection, and strategic conservation of natural lands.
 - 5.8 Limit the placement of stormwater structures within the boundaries of regulated environmental features and their buffers to outfall pipes or other features that cannot be located elsewhere.
 - 5.9 Prioritize the preservation and replanting of vegetation along streams and wetlands to create and expand forested stream buffers to improve water quality.

The submitted Plat of Special Exception Site and Landscape Plan and Tree Conservation Plan shows sediment traps and basins as part of the reclamation efforts to control stormwater. The active mining of the application will be in four mining phases. Stormwater will be controlled during the active mining phase with several basins within the mining pit. No stormwater management structures during or after the mining activities will be within or draining into the on-site REF areas. All on-site REF areas will remain undisturbed other than the impacts proposed for the elevated conveyor and access road.

POLICY 7: Preserve, enhance, connect, restore, and preserve forest and tree canopy coverage.

General Strategies for Increasing Forest and Tree Canopy Coverage

- 7.1 Continue to maximize on-site woodland conservation and limit the use of off-site banking and the use of fee-in-lieu.
- 7.2 Protect, restore, and require the use of native plants. Prioritize the use of species with higher ecological values and plant species that are adaptable to climate change.
- 7.4 Ensure that trees that are preserved or planted are provided appropriate soils and adequate canopy and root space to continue growth and reach maturity. Where appropriate, ensure that soil treatments and/or amendments are used.

The proposed on-site preservation and reforestation area will be placed in a woodland and wildlife habitat conservation easement. As part of the site's reclamation plan, the TCP2 shows the entire mining limits reforested. With the addition of the woodland preservation, the development will meet their woodland conservation requirement entirely on-site. The landscaping materials and specifications and the tree canopy requirement details will be addressed at the time of permit review.

Forest Canopy Strategies

7.12 Discourage the creation of new forest edges by requiring edge treatments such as the planting of shade trees in areas where new forest edges are proposed to reduce the growth of invasive plants.

The application proposes woodland clearing for a subsurface mining operation. The mining area will be fully restored with reforestation plantings after the mining operations have ceased. No new forest edges will be created.

CONFORMANCE WITH REQUIRED FINDINGS FOR A SPECIAL EXCEPTION

The required findings for approval of a Special Exception are given in Section 27-317 of the prior Zoning Ordinance. The **required findings which are environmental in nature are indicated in bold**, and the comments are provided in regular type.

- (a) A Special Exception may be approved if:
 - (3) The proposed use will not substantially impair the integrity of any validly approved Master Plan or Functional Master Plan, or, in the absence of a Master Plan or Functional Master Plan, the General Plan;

The proposed special exception is in conformance with the environmental provisions of the 2035 General Plan, the Area Master Plan and the 2017 *Countywide Green Infrastructure Plan* as noted herein.

(4) The proposed use will not adversely affect the health, safety, or welfare of residents or workers in the area;

The proposed use is subject to County and state regulations related to environmental management and safety that will protect the health, safety, and welfare of residents nearby and workers on-site. A detailed analysis of the potential impacts is provided in the Environmental Impact Report (EIR-22007). Recommended conditions are proposed herein to address potential impacts.

(5) The proposed use will not be detrimental to the use or development of adjacent properties or the general neighborhood; and

The potential effects of the proposed use have been identified in the EIR and are addressed in more detail in the Environmental Review section of this memorandum.

(6) The proposed site plan is in conformance with an approved Type 2 Tree Conservation Plan; and

Minor revisions to the TCP2 are required for conformance with the 2010 WCO, as described in the Environmental Review section of this memorandum.

(7) The proposed site plan demonstrates the preservation and/or restoration of the regulated environmental features in a natural state to the fullest extent possible in accordance with the requirement of Subtitle 24-130(b)(5).

The TCP2 shows an encroachment into the regulated environmental features for one impact for the construction of an elevated conveyor system and access road to cross an intermittent stream system. A statement of justification was included in the Special Exception Statement of Justification received by EPS on June 28, 2024. The PMA impacts for the construction of a conveyor and access road total 0.80 acre (1.85 linear feet of stream bed and 0.72 acre of 100-year floodplain). These impacts are considered necessary for the orderly development of the subject property as a surface mine and are addressed in more detail in the Environmental Review section of this memorandum.

Section 27-410 of the Zoning Ordinance lists the specific requirements for a Special Exception for Surface Mining. The **environmentally based requirements are indicated in bold**, and the comments are provided in plain text.

- (a) The surface mining of natural materials or deposits (including sand, gravel, or clay pits; rock or stone quarries; and the removal of earth or topsoil) may be permitted, subject to the following:
 - (1) Heavy machinery may be used for the extraction of natural material or deposits from the site. Except in the I-2 Zone, heavy machinery may not be used for washing, refining, or other processing, unless a Special Exception is granted for sand and gravel wetprocessing under the provisions of Section 27-405;

The application area is zoned AR, but the applicant will use the prior R-A zone. Heavy machinery will only be utilized for the extraction and removal of sand and gravel from the subject site.

A wash plant, also known as "wet-processing," is not proposed on-site; the materials are to be transported off-site to the adjacent Gaslight I facility by the proposed elevated conveyor system located in the southeast corner. The adjacent Gaslight I Wash Plant facility to the east will perform the wet-processing of the material (SE-4651 and SE-4402).

(2) The use shall not be noxious, offensive, or otherwise objectionable by reason of dust, smoke, or vibration;

Air quality issues have been addressed in the associated EIR and further in the Environmental Review section of this memorandum.

(3) The land areas exposed by the extraction and removal of natural materials or deposits shall be left suitable for development. A grading plan shall be submitted (along with the site plan) showing the existing and proposed ground elevations of the site, adjacent land, and all abutting streets. The exposed land area shall have a slope not greater than three-to-one (3:1), except where any portion of the site is developed for port or harbor facilities;

A Plat of Special Exception Site and Landscape Plan and TCP2 showing the proposed reclamation final grades have been reviewed with this application. None of the proposed grades are greater slope than 3:1.

- (4) The Special Exception shall be valid for not longer than five (5) years, except where the use is located:
 - (A) In an R-R Zone which is predominantly undeveloped for a radius of one (1) mile from the operation; or
 - (B) In an I-2 Zone:

It is recommended that the special exception be conditioned to be valid for no more than five years. The property is not in either the R-R or I-2 Zones.

(5) In addition to the requirements of Section 27-296(c), the site plan shall show an estimate of the time required for the removal of the material;

It is recommended that the special exception be conditioned to be valid for no more than five years.

(8) The Technical Staff Report prepared in response to the application shall include a current, Countywide inventory of the locations, dates of approval, and conditions of approval concerning haul routes and estimated loads per day for all approved and pending Special Exceptions for sand and gravel wet-processing, sanitary landfills and rubble fills, and surface mining, as indicated by the record in the case. The inventory shall also include the locations of all nonconforming sand and gravel wet-processing, sanitary landfills and rubble fills, and surface mining operations throughout the County that were certified after September 6, 1974.

This information has been provided in the EIR.

(b) In the I-3 Zone, the use shall be staged in conformance with the required Conceptual Site Plan. The District Council may require (as a condition of approval) that this use be terminated prior to a Detailed Site Plan being approved for another use included on the Conceptual Site Plan.

The application mining area is zoned AR, but the applicant will use the prior R-A zone.

(c) In the M-A-C, L-A-C, E-I-A, R-U, R-M, and R-S Zones, no surface mining operation may be permitted after a Specific Design Plan for the subject property has been approved. An application for this Special Exception may only be accepted, and the Special Exception granted, if no Specific Design Plan has yet been filed for the subject property.

The application mining area is zoned AR, but the applicant will use the prior R-A zone.

(d) In reviewing the application, the District Council shall consider the use of techniques which provide for noise attenuation.

Noise issues have been addressed in the EIR and in the recommended conditions provided in the Environmental Review section of this memorandum.

(e) On land which is located within a Chesapeake Bay Critical Area Overlay Zone, development is subject to Subtitle 5B.

The subject site is not located in the Chesapeake Bay Critical Area Overlay Zone.

(f) In reviewing the application for compliance with the required findings set forth in Sections 27-317(a)(4) and 27-317(a)(5), the District Council shall consider the inventory required in Section 27-410(a)(8).

The proposed application is in compliance with the required findings of Section 27-317 as demonstrated above or as conditioned below.

MARYLAND DEPARTMENT OF THE ENVIRONMENT – MINING APPROVAL

The Maryland Department of the Environment (MDE) issues a mining permit for sand and gravel mines in Maryland. Through this permit, MDE only has jurisdiction over the mining operation and does not enforce the conditions of the special exception or the requirements for woodland conservation. The issuance of a County grading permit in conformance with Subtitle 32 will allow the County inspectors to inspect and enforce the site development elements that are controlled at the County level and the proposed conditions of the special exception application.

The Zoning Ordinance provides the opportunity to address issues raised during the review of a special exception through the imposition of conditions of approval. The text below in **BOLD** is from the ordinance and comments provided in plain text:

Sec. 27-318. Conditional approval.

When a Special Exception is approved, any requirements or conditions deemed necessary to protect adjacent properties and the general neighborhood may be added to those of this Subtitle.

Without the issuance of a local permit, oversight of the proper implementation of the special exception conditions and woodland conservation requirements at the County level is not possible, and staff recommend that a grading permit (or equivalent) should be a requirement of approval of this special exception for mining.

The permit fee for the grading permit should be limited to the limits of disturbance associated with the special exception approval that are not enforced by MDE. Specifically, the grading permit should be issued for the paved portion of the employee entrance road of Accokeek Road, as this construction is outside of the MDE review. By requiring a County permit for this limited area, the cost of the permit will be greatly reduced (from that of a permit for the entire disturbed area), while providing County inspectors the ability to ensure the proper implementation of the special exception conditions and woodland conservation requirements for the overall site.

The issuance of a County grading permit will also allow the posting of a bond for reforestation as part of the proposed TCP2. Without a grading permit, there is no method at the local level to post this bond or inspect and approve the proposed reforestation areas.

The issuance of a County grading permit (or equivalent) will provide a mechanism for enforcement of the conditions of the mining special exception and is necessary to protect adjacent properties and the surrounding community in accordance with Section 27-318 of the prior County code.

Prior to commencement of the mining operation, a special permit shall be obtained from DPIE to ensure compliance with the grading plan approved under Section 27-410(a)(3) of the prior Zoning Ordinance. The permit shall require the applicant to post a bond acceptable to the County Attorney to secure its obligations pertaining to reforestation and landscaping as required by this SE.

The area to be mined shall be reclaimed in accordance with the Reclamation Plan by filling with acceptable materials as described in Prince George's County Building Code.

ENVIRONMENTAL REVIEW

Natural Resource Inventory Plan/Existing Features

A natural resource inventory (NRI-133-2022) was approved on August 18, 2022, and provided with this application. The site contains 100-year floodplain, steep slopes, wetlands, streams, and their associated buffers which comprise the Primary Management Area (PMA). There are 17 specimen trees scattered throughout the property. The TCP2 and the SE show all the required information correctly in conformance with the NRI. No revisions are required for conformance to the NRI.

Woodland Conservation

This property is subject to the grandfathering provisions of the 2024 Woodland Conservation Ordinance because the TCP2 provided with this application was accepted for review on or before June 30, 2024. This application shall conform to the environmental regulations of the 2010 Prince George's County Woodland and Wildlife Habitat Conservation Ordinance (WCO). Type 2 tree conservation plan (TCP2-033-2024) was submitted with the SE application.

Based on the TCP2, the site's gross tract area is 351.29 acres with 66.84 acres of 100-year floodplain resulting in a net tract area of 284.45 acres. The site contains 284.45 acres of woodland on the net tract and 65.33 acres of woodled floodplain. The woodland conservation threshold is 50 percent, and the requirement is 142.23 acres.

The woodland conservation worksheet proposes the removal of 226.86 acres in the net tract area, and 0.58 acres within the floodplain for a woodland conservation requirement of 263.00 acres. The woodland conservation requirement is proposed to be met with 57.59 acres of woodland preservation on-site and 205.41 acres of reforestation on-site. The entire woodland conservation requirement will be met on-site through preservation and reforestation plantings. The NRI has identified 17 specimen trees on-site and the applicant requests for four specimen trees to be removed as part of this application.

Technical revisions are required to the TCP2 which are included in the conditions listed at the end of this memorandum.

SPECIMEN TREES

Review of Subtitle 25 Variance Request

Section 25-122(b)(1)(G) requires that "Specimen trees, champion trees, and trees that are part of a historic site or are associated with a historic structure shall be preserved and the design shall either preserve the critical root zone of each tree in its entirety or preserve an appropriate percentage of the critical root zone in keeping with the tree's condition and the species' ability to survive construction as provided in the [Environmental] Technical Manual." The code, however, is not inflexible.

The authorizing legislation of Prince George's County's WCO is the Maryland Forest Conservation Act, which is codified under Title 5, Subtitle 16 of the Natural Resources Article of the Maryland Code. Section 5-1611 of the Natural Resources Article requires the local jurisdiction to provide procedures for granting variances to the local forest conservation program. The variance criteria in Prince George's County's WCO are set forth in Section 25-119(d). Section 25-119(d)(4) clarifies that variances granted under Subtitle 25 are not considered zoning variances.

A Subtitle 25 Variance application and a statement of justification in support of the variance was received for review with this application and is dated April 24, 2024. The application area contains 17 on-site specimen trees with good (ST-3, ST-5, ST-6, ST-7, ST-8, ST-9, ST-10, ST-11, ST-13, and ST-15), fair (ST-2, ST-12, ST-14, and ST-16), and poor (ST-1, ST-4, and ST-17) condition ratings. The mining limits of disturbance proposes the removal of four specimen trees, specifically ST-1, ST-3, ST-6, and ST-17.

Section 25-119(d)(1) of the WCO contains six required findings to be made before a variance can be granted. The Letter of Justification submitted seeks to address the required findings for the four specimen trees, and details specific to individual trees have been provided in the following chart.

Specimen Tree Schedule Summary

ST#	Common Name	Diameter at Breast Height - DBH (In inches)	Condition	Root Zone Impact	Retain/Remove
ST-1	White oak	31	Poor	100%	Remove
ST-3	American beech	31	Good	100%	Remove
ST-6	White oak	42	Good	100%	Remove
ST-17	American beech	31	Poor	100%	Remove

Statement of Justification Request:

A variance from Section 25-122(b)(1)(G) is requested for the removal of four specimen trees. This variance is requested to the Woodland and Wildlife Conservation Habitat Ordinance, which requires, under Section 25-122(a)(1) of the Prince George's County Zoning Ordinance, that "woodland conservation shall be designed as stated in this Division unless a variance is approved by the approving authority for the associated case." Section (b)(1)(G) required the preservation of specimen trees. The applicant provided this Subtitle 25 Variance Application and Statement of Justification to demonstrate how the findings of Section 25-119(d)(1) are being met.

The text in **bold**, labeled A-F, are the six criteria listed in Section 25-119(d)(1). The plain text provides responses to the criteria.

(A) Special conditions peculiar to the property have caused the unwarranted hardship;

In relation to other mining properties in the area, special conditions peculiar to the property would cause an unwarranted hardship if the applicant were required to retain the four specimen trees identified as ST-1, ST-3, ST-6, and ST-17. The condition rating of the trees are two in good condition and two in poor condition; the construction tolerance of the White oak is medium and the American beech has a poor tolerance; and the four trees are located within the proposed mining area. The mining application area is mostly wooded, with identified sand and gravel deposits below the surface. As shown on the TCP2, specimen trees ST-3 and ST-6 are located within the clearing area that will be reforested as WRA-1, and specimen trees ST-1 and ST-17 are located in the clearing area that will be reforested as WRA-2. Requiring the applicant to retain the four specimen trees on the site would prevent the applicant from obtaining all the available sand and gravel below the surface, to the extent that it would cause the applicant an unwarranted hardship.

(B) Enforcement of these rules will deprive the applicant of rights commonly enjoyed by others in similar areas.

Enforcement of the requirement that all specimen trees be preserved would deprive the applicant of rights commonly enjoyed by other mining properties in similar areas. The overall site contains 17 specimen trees, and the applicant is proposing to remove four of these trees. The applicant wants to expand their mining operations from the adjacent property that has known amounts of sand and gravel deposits. If the applicant were required to save these four specimen trees and not be able to remove the underlying mineral deposits, it would deprive the applicant of rights commonly enjoyed by other mining properties in similar areas.

(C) Granting the variance will not confer on the applicant a special privilege that would be denied to other applicants.

Not granting the variance would prevent the project from being developed in a functional and efficient manner. This is not a special privilege that would be denied to other applicants. If other similar mining developments contained specimen trees within mineral deposit areas, it would be given the same considerations during the review of the required variance application.

(D) The request is not based on conditions or circumstances which are the result of actions by the applicant.

The applicant has taken no actions leading to the conditions or circumstances that are the subject of the variance request. The removal of specimen trees identified as ST-1, ST-3, ST-6, and ST-17 is the result of the location of the subsurface mineral deposits and the result of the mining extraction process. Saving the adjacent REF areas is important due to the proximity to the Mattawoman Creek stream valley which is identified as a County special conservation area within the Green Infrastructure Plan, and to minimize impacts to REFs and their woodland buffers the mining is limited where possible to outside of the REF. Specimen trees ST-1, ST-3, ST-6, and ST-17 are located outside of the REF. These trees are requested for removal to achieve optimal mining extraction areas outside the on-site REF areas.

(E) The request does not arise from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property; and

There are no existing conditions, existing land, or building uses on the site or neighboring properties that have any impact on the location or size of the four specimen trees. Specimen trees ST-1, ST-3, ST-6, and ST-17 have grown to specimen tree size based on natural conditions and have not been impacted by any neighboring land or building uses.

(F) Granting of the variance will not adversely affect water quality.

The removal of four specimen trees will not adversely affect water quality. In addition, the proposed Gaslight III mining site will not adversely affect water quality. The project will be subject to the requirements and protections of waterways by the MDE, Prince George's County Soil Conservation District (PGSCD), and the approval of a stormwater concept plan by DPIE. The applicant is proposing to reclaim the site after mining activities have ceased. They will meet their total woodland conservation requirements with on-site preservation and reforestation plantings.

Preservation of Regulated Environmental Features (REF)/Primary Management Area (PMA)

Section 27-317(a)(7) of the prior Zoning Ordinance states that the Planning Board may approve a special exception if it finds that the regulated environmental features have been preserved and/or restored in a natural state to the fullest extent possible in accordance with the requirement Section 24-130(b)(5) of the Subdivision Ordinance. The on-site REF includes streams, 100-year floodplain, wetlands and associated buffers, and steep slopes.

Section 24-130(b)(5) of the Subdivision Regulations states: "Where a property is located outside the Chesapeake Bay Critical Areas Overlay Zones the preliminary plan and all plans associated with the subject application shall demonstrate the preservation and/or restoration of regulated environmental features in a natural state to the fullest extent possible consistent with the guidance provided by the Environmental Technical Manual established by Subtitle 25. Any lot with an impact shall demonstrate sufficient net lot area where a net lot area is required pursuant to Subtitle 27, for the reasonable development of the lot outside the regulated feature. All regulated environmental features shall be placed in a conservation easement and depicted on the final plat."

Impacts to the REF should be limited to those that are necessary for the development of the property. Necessary impacts are those that are directly attributable to infrastructure required for the reasonable use, orderly, and efficient development of the subject property, or are those that are required by County Code for reasons of health, safety, or welfare. Necessary impacts include, but are not limited to, adequate sanitary sewerage lines and water lines, road crossings for required street connections, and outfalls for stormwater management (SWM) facilities.

Road crossings of streams and/or wetlands may be appropriate if placed at the location of an existing crossing or at the point of least impact to the REF. Stormwater management outfalls may also be considered necessary if the site has been designed to place the outfall at the point of least impact. The types of impacts that should be avoided include those for site grading, building placement, parking, SWM facilities (not including outfalls), and road crossings where reasonable alternatives exist. The cumulative impacts for the development of a property should be the fewest necessary and sufficient to reasonably develop the site in conformance with the County Code.

In this application, the proposed impact to the PMA is for an elevated conveyor belt to transport mining product and for an access road to the mine. A statement of justification (SOJ) was submitted with the application dated August 21, 2024, and was updated on January 7, 2025 (still dated August 21,2024), for the proposed impacts to the PMA.

PMA Impact Area	PMA (SF)	Stream Buffer (SF)	100-year Floodplain (SF)	Stream Bed (LF)	Steep slopes, Wetland, And Wetland Buffer (SF)
Conveyor and Access	34,802	28,595.44	31,172	185	0
Road Crossing					
Total	34,802	28,595.44	31,172	185	0
	(0.80 AC)	(0.66 AC)	(0.72 AC)	185	0

SF = Square Feet

AC = Acres

LF = Linear Feet

Statement of Justification

The Statement of Justification (SOJ) includes a request to impact 0.80 acre (34,802 square feet) of on-site PMA for construction of an elevated conveyor belt structure to transport mining product. The proposed application is for a surface mining project which will not have any stormwater management outfall impacts. The proposed mining pit will be graded in a way that the pit will act as a stormwater pond. The requested PMA impact will be replanted as part of its reclamation plan and tree conservation plan.

The applicant has applied for a Joint Federal/State Application for the Alteration of Any Floodplain, Water way, Tidal or Nontidal Wetland in Maryland with the MDE and COE for the wetland, and wetland buffer impacts. This application (24-NT-0188/202461254) was approved on October 9, 2024, and expires October 9, 2029. The approval allows for a temporary access road and an aggregate material conveyor for a sand and gravel mine.

Analysis of Impacts

The application area is entirely wooded with several streams located within the property. This proposed mining site is located adjacent to another active mining site owned by the same owner. The proposed elevated conveyor belt system will connect the subject applicated area with the adjacent mining property. Based on the statement of justification, the applicant is requesting one impact area as described below:

Elevated Conveyor Impact - PMA impacts totaling 0.80 acre are requested for construction of one proposed elevated conveyor belt structure to transport product across the on-site stream system in the southern portion of the application area. This impact area will be reforested as part of the required reclamation as part of the MDE mining permit. The impact area will disturb PMA, stream buffer, and stream.

The subject mining application for the one PMA impact (elevated conveyor) is required to transport the on-site mining product across a stream section to an adjacent active mining site for processing. The application area has a stream system the separates the two on-site mining areas. No other PMA impacts are proposed. As part of the mining permit approval, the site is required to have a reclamation plan to replant the subject impact area. Staff supports the one proposed PMA impact area and replanted as shown on TCP2-033-2024.

Noise Study

A noise study "Environmental Noise Assessment -Sand and Gravel Extraction – Gaslight III Quary Site, Prince George's County" was prepared by Michael A. Staiano (Staiano Engineering Inc.) dated March 4, 2024, and was received on June 28, 2024. The field work was performed during October 2023. The noise analysis contained in this report was conducted by Staiano Engineering Inc. using available resources and equipment. It is purposefully simplistic in nature and should be viewed as an overview of the potential noise impacts of the proposed sand and gravel mining operation. It does not include the potential noise impacts of the associated wet processing plant because that use is not part of the subject application.

Noise impacts are evaluated with respect to how the predicted noise levels compare with state noise standards and regulations (COMAR 26.02.03). The state noise standards apply to noise receptors and are established based on the adjacent land use categories (industrial, commercial, and residential). The maximum allowable noise level for receiving residential uses is 65 dBA during the daytime. It should be noted that the mining operation will have only daytime hours of operation and that the noise generated from mining operations is instantaneous noise, not the 24-hour day/night average (Ldn) standard used in Prince George's County with respect to traffic noise. Instantaneous noise levels are more restrictive, defined by COMAR, and used for the evaluation of noise emanating from mining sites. Traffic generated noise is regulated using the average 24-hour level or Ldn because traffic noise occurs both day and night. The hours of operation proposed for the mining operation do not include nighttime hours.

The usual noise environment in mining projects is affected by noise from two types of sources: point and non-point. Point source noise emanates from the various excavation equipment used on-site. Non-point source noise emanates from the flow of vehicular traffic along a roadway or haul road.

The main noise source of the application area is anticipated to be vehicular- and machine-related noise in relation to mining operations, such as dump trucks and excavation machines moving around on the site. The current application does not propose to haul material off-site on Accokeek Road; rather, the proposal includes an elevated conveyor system to transfer material for the application area to the adjacent existing Gaslight I Wash Plant facility (SE-4651 and SE-4402).

The noise study used the noise levels measured for the equipment proposed to operate on-site to predict the point source noise associated with the proposed mining operation. Sound abatement in the form of berms is proposed to reduce noise levels at the property boundary. The results of the report indicate that the Code of Maryland Regulations residential noise limit (65 dBA) is expected to be met at all receptors based on the proposed site design, which includes vegetated 15-foot-high noise berms along Accokeek Road as shown on the special exception site plan. The noise report indicates that with the installation of berms, the noise standard of 65 dBA for residential areas is anticipated to be met on-site.

A separate evaluation is presented in the report for the predicted noise associated with the proposed conveyor. The noise sources considered for the conveyance of material includes a conveyor hopper as well as a hauler. The material will be dumped into a conveyor hopper from the off-road haul trucks. The hopper location will move as the mining progresses. The evaluation was performed for the position of the conveyor loading that is closest to the evaluated receptor. The results of the evaluation indicate that the conveyor noise contributions are negligible.

Noise recommended conditions are listed at the end of the memorandum.

Air Quality Report

The application package for the subject special exception included an air quality report prepared by Jenkins Environmental Inc. dated October 12, 2023, and a supplemental report dated March 13, 2024. The air report, in conjunction with local monitoring station data, has been used for the following analysis. It is important to know the ambient air quality at the site and in the vicinity in order to measure the impact of the proposed use. Air quality in the area of the subject property is mainly impacted by farming operations and other sand and gravel operations.

The air report presented an evaluation of the predicted impacts on air quality by providing the ambient (or background) air quality measurements and the predicted levels of pollutants that will result from the proposed mining activity. The combined information was compared to the established air quality standards. The standards are known as the National Ambient Air Quality Standards (NAAQS) which are established for six criteria pollutants: carbon monoxide, lead, nitrogen dioxide, ground-level ozone, particulate matter, and sulfur dioxide.

The report indicates that ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead are included in the ambient air quality section; however, the emissions of these pollutants from the proposed sand and gravel operation (from internal combustion engines on mobile equipment) are minimal and as such would not change the air quality of the site above the baseline monitoring values.

The report concludes that all pollutants are expected to be below the NAAQS with the exception of ozone and particulate matter $(PM_{2.5})$. These pollutants have ambient levels above the NAAQS and are in non-attainment for the County. The report indicates that the emissions of these pollutants from the proposed operation are minimal and would not worsen the ambient air quality of Prince George's County.

Particulate matter is of concern as it is generated during surface mining operations primarily during the vegetation clearing process and during mined material transportation. No off-site truck transport of mined materials is proposed with this location only the use of an elevated conveyor system to move the material to the adjacent Gaslight I wash plant facility. The actual mining operation does not generate a substantial amount of particulate matter as the materials are coarse and tend to have a high moisture content.

Air quality recommended conditions are listed at the end of the memorandum.

Hydrologic Evaluation Report

A Hydrologic Evaluation report prepared by Geo-Technology Associates Inc., (GTA) dated October 4, 2024, has been reviewed. The reports include a domestic well search area plan, an evaluation of the potential for groundwater disturbance (including a conceptual cross section that shows the groundwater depth in relation to the proposed depth of mining), and MDE well status data.

The report states that based on test pits, the depth to groundwater ranges from 204 to 211 feet above mean sea level, or about 23 feet below the surface in the upland area of the site. The water table slopes northwest on the western portion of the site and east on the eastern portion of the site as a subdued reflection of topography. The cross section provided in the report illustrates a 'worst case' scenario because it is close to the wetlands and stream and the test pit data showed that the product thickness was greatest in this area. The cross section indicates that the depth of mining ranges in elevation from approximately 198 feet to about 226 feet. The interception, pumping, and storage of groundwater, or dewatering, is not proposed; therefore, the water table should not be negatively impacted.

The report states that the interception, pumping, and storage of groundwater, known as dewatering, is not proposed. However, temporary, localized dewatering may be necessary for safe resource extraction because the mining of several portions of the property is proposed to occur at a depth below the existing water table. Any pumped water will be required to be purposefully discharged through professionally engineered and permitted water handling systems. Only mineral extraction is proposed, and no washing or processing of raw material is proposed on-site.

The location of existing wells within a 1,000-foot radius was provided in the report and on an exhibit. The information presented in the report is based on a combination of information obtained by GTA and cross-referenced well completion data obtained from MDE and the Prince George's County Health Department with parcel ownership data. All identified wells have been depicted on the Domestic Well Search Area Plan included in the table below.

	Properties located within a Quarter Mile of the subject site with wells						
Permit #	Road Name/ Address	Well Total Depth (Feet)	Well Drill Method	Well Uses			
PG730175	Springfield Rd	50	Bored	Drinking Water			
PG730176	Springfield Rd	52	Bored	Drinking Water			
PG730396	RT 373(Accokeek Rd)	No Data	Bored	Drinking Water			

PG730550	Springfield Rd	No Data	Rotary	Drinking Water
PG730829	Gardner Rd	371	Rotary	Drinking Water
PG810760	RT	421	Rotary	Drinking Water
	373(Accokeek			
	Rd)			
PG811161	4804 Danville	430	Rotary	Drinking Water
	Rd			
PG881066	Accokeek Rd	445	Rotary	Drinking Water
PG882574	Accokeek Rd	355	Rotary	Drinking Water
PG882077	Accokeek Rd	33	Bored	Test Well
PG882078	Accokeek Rd	29	Bored	Test well
PG920296	4510 Accokeek	446	Rotary	Drinking Water
	Rd			
PG941235	4404 Accokeek	420	Rotary	Drinking Water
	Rd			
PG942195	4701 Accokeek	437	Rotary	Drinking Water
	Rd			
PG940960	McKendree			Test Well
PG942741	4500 Suitland	35	Bored	Test Well
	Rd			
PG950336	5601 Accokeek	520	Rotary	Industrial/Commercial/Dewatering
	Rd			
PG950368	Accokeek	876	Rotary	Industrial/Commercial/Dewatering

The applicant has identified all wells within 1,000 feet of the subject site, to the extent practical. Impacts to wells in the surrounding area are not anticipated because dewatering operations are not proposed; therefore, no drawdown of the groundwater table due to pumping is expected. Because no dewatering is proposed, no drawdown calculations were provided.

The hydrogeologic conditions that underlie the site vicinity include a confining layer that acts as a hydraulic barrier between the surficial water table aquifer in the upland deposits, and the deeper aquifers that supply groundwater to wells in the area. Therefore, if localized dewatering is needed during the mining operation to address encountered groundwater, the pumping would be temporary in nature and would not likely affect the groundwater level associated with wells in the area.

The report also indicates that no adverse impacts on the hydrologic support of the on-site stream systems are anticipated. Although the topography will be altered during the mining operation, the disturbance will be phased, and the final grades should reestablish similar groundwater flow patterns that currently exist. The stormwater management and sediment erosion control measures proposed are designed to control surface water and hydrologic recharge and impacts to down-stream systems are expected to be negligible due to the relatively small hydrologic contribution from the site on a regional scale.

Although no impacts to surrounding wells are anticipated, the applicant may need to provide new wells for any property owner within 1,000 feet whose well is negatively affected by the mining operation. A condition is proposed to address this situation should it arise.

Hydrologic recommended conditions are listed at the end of the memorandum.

Stormwater Management and Grading, Erosion, and Sediment Control

An unapproved "DPIE 55642-2024-SDC Site Development Concept Plan" was submitted with the subject application. This plan was submitted to the Prince George's County Department of Permitting, Inspections and Enforcement (DPIE) for approval. The submitted plan is for the construction of the employee and visitor entrance road off Accokeek Road. No further action regarding SWM is required with this SE review.

All grading, erosion and sediment control plans are reviewed by the Prince George's County Soil Conservation District (SCD) for conformance with the current Maryland Standards and Specifications for Soil Erosion and Sediment Control as well as the current Prince George's Soil Conservation District Soil Erosion and Sediment Control Pond Safety Manual. Sediment and erosion control devices must function for both existing and proposed drainage areas and elevations. All outfalls must be designed to ensure non erosive conditions.

A Water Quality Certification (COMAR 26.08.02.10) is required for any activity which may result in any discharge to navigable waters unless the applicant provides a certification from the state that the activity does not violate state water quality standards or limitations. Discharges permitted by the state under the National Pollutant Discharge Elimination System (NPDES) are certified by MDE.

No specific erosion and sediment control or stormwater management information has been submitted to date; however, the proposed protective devices, including the general location of sediment control trap, basins and tree protection devices have been shown on the TCP2 and Plat of Special Exception Site and Landscape Plan. A copy of the technical sediment erosion control plan is needed for review purposes prior to certification of the special exception to verify that the limits of disturbance shown on the TCP2 are in general conformance with the technical sediment erosion control plan.

At this time, no mining sequence has been provided on the submitted TCP2 and Plat of Special Exception Site and Landscape Plan. All that has been provided has been various plans showing the proposed final grading elevations and the four mining phase locations.

SUMMARY OF RECOMMENDED FINDINGS AND CONDITIONS

The Environmental Planning Section recommends approval of Special Exception SE-22007 and TCP2-033-2024 subject to the following findings and conditions:

Recommended Findings:

- 1. The required findings of Section 25-119(d) have been adequately addressed for the removal of four specimen trees identified as ST-1, ST-3, ST-6, and ST-17.
- 2. Based on the level of design information currently available and the limits of disturbance shown on the TCP2, the regulated environmental features (REF) on the subject property have been preserved and will be restored to the fullest extent possible and the conclusion of the mining operations. The PMA impacts associated with the construction of an access road and for an elevated conveyor system to transport the mining product are the only impacts and those areas will be fully restored as part of the required reclamation process.

- 3. The issuance of a County grading permit (or equivalent) will provide a mechanism for enforcement of the conditions of the mining special exception and is necessary to protect adjacent properties and the surrounding community in accordance with Section 27-318 of the County code.
- 4. The rural historic landscape along Accokeek Roads as well as the visibility of the mining operation from dwellings or structures within the potential viewshed of the application are not expected to be significantly affected by the subject application based on the information provided. An employee and visitor entrance road will be constructed off Accokeek Road. This proposed entrance road will have a 90-foot opening within the existing roadside woodlands.

Recommended Conditions:

- 1. Prior to signature approval of the special exception plan the Type 2 tree conservation plan shall be revised as follows:
 - a. Add TCP2-033-2024 to approval block, woodland conservation worksheet, and title block.
 - b. On Sheet 2 show the proposed woodland clearing width and distance of the proposed private entrance off Accokeek Road.
 - c. On all sheets label the proposed berms along Accokeek Road, and the proposed stormwater structures (riprap, inlet and outfall structures).
 - d. Revise the PMA conveyor crossing impact to match the area approved with MDE permit showing the access road in same location.
 - e. On Sheet 11 of 17 add the missing word "conveyor" to the "exist. portable..." wording on Gaslight I property.
 - f. On Sheet 16 of 17 add a note below the planting schedule stating that reclamation planting will occur after all mining extraction and fine grading of mining area has been completed.
 - g. Have the revised plan signed and dated by the qualified professional preparing the plan.
- 2. Prior to signature approval of the special exception plan, a conservation easement shall be recorded in the land records in accordance with Section 25-122(d)(1)(B). The conservation easement shall be described by bearings, distances and an exhibit. The conservation easement shall contain the delineated primary management area, except for approved impacts, and shall be reviewed by the Environmental Planning Section prior to approval of the special exception plan. The following note shall be placed on the woodland conservation easement exhibit:
 - "Conservation easements described on this exhibit are areas where the installation of structures and roads and the removal of vegetation are prohibited without prior written consent from the M-NCPPC Planning Director or designee. The removal of hazardous trees, limbs, branches, or trunks is allowed."
- 3. Prior to certification of the special exception plan, a woodland conservation easement shall be recorded in the land records in accordance with Section 25-122(d)(1)(B). The woodland conservation easement shall be described by bearings, distances and an exhibit. The woodland conservation easement shall contain the delineated woodland conservation threshold and shall be reviewed by the Environmental Planning Section prior to approval of the special exception plan. The following notes shall be placed on the woodland conservation easement exhibit:

"Conservation easements described on this exhibit are areas where the installation of structures and roads and the removal of vegetation are prohibited without prior written

consent from the M-NCPPC Planning Director or designee. The removal of hazardous trees, limbs, branches, or trunks is allowed."

"This development is subject to restrictions shown on the approved Type 2 Tree Conservation Plan (TCP2-033-2024), or as modified by a future Type 2 Tree Conservation Plan and precludes any disturbance or installation of any structure within specific areas. Failure to comply will mean a violation of an approved Tree Conservation Plan and will make the owner subject to mitigation under the Woodland Conservation/Tree Preservation Policy."

4. Prior to the certification of the TCP2 for this site, documents for the required woodland conservation easements shall be prepared and submitted to the Environmental Planning Section (EPS) for review by the Office of Law, and submission to the Office of Land Records for recordation. The following note shall be added to the standard Type 2 Tree Conservation Plan notes on the plan as follows:

"Woodlands preserved, planted, or regenerated in fulfillment of woodland conservation requirements on-site have been placed in a woodland and wildlife habitat conservation easement recorded in the Prince George's County Land Records at Liber _____ Folio____.

Revisions to this TCP2 may require a revision to the recorded easement."

- 5. Prior to certification of the special exception, the Site Development Concept Plan (DPIE 55642-2024-SDC) shall be revised to include a detail for the material to be used on the restricted access road beyond the Accokeek Road apron area.
- 6. Water: If the operation of the subject sand and gravel mine impacts the water level in any wells within 1,000 feet of the subject mining site as verified by MDE, corrective action shall be immediately taken by the applicant, including but not limited to, the drilling of a new well to replace the adversely affected well.
- 7. **Air:** Mitigation of particulate matter emissions shall be accomplished by implementation of the following:
 - A. The interior mining haul roads shall be maintained with a water truck or other approved dust control methods. No truck hauling is proposed on Accokeek Road.
 - B. Asphalt, oil, water, or suitable chemicals shall be applied on dirt roads, materials stockpiles, and other surfaces which can create airborne dusts.
 - C. Open-bodied vehicles transporting materials shall be covered at all times when in motion, in accordance with COMAR regulations.
 - D. The site shall have a 15-mph speed limit to reduce dust generation from travel on the unpaved haul road.
- 8. All mobile equipment to be used on-site shall use ultra-low sulfur diesel fuel. The fuel supplier certification of the sulfur content of each fuel delivery shall be kept on-site for the duration of the special exception approval period.
- 9. Equipment fueling on-site shall be done in accordance with NFPA 30 (National Fire Protection Association), Flammable and Combustible Liquids Code, Chapters 2 and 3. The mobile fueling trucks shall be operated by trained personnel holding valid oil vehicle operator's certificates as

required by COMAR 26.10.01.17. Care shall be taken to minimize spillage. Refueling shall take place as far from streams and wetlands as possible.

- 10. **Noise:** The following typical restrictions on mining operations should be employed to reduce non-point/ traffic generated noise impacts in the surrounding area:
 - A. Mining operations on the site are restricted to the hours allowed from 7:00 am to 7:00 pm Monday through Friday and 7:00 am to 4:00 pm on Saturdays, excluding federal holidays. There are no operations on Sundays.
 - B. The noise mitigation berms shall be located as shown on the plans submitted to protect nearby residential buildings and properties. All berms shall be a minimum of 15 feet in height.
 - C. Trucks should not use compression or "Jake" brakes both on-site and on the haul road.
 - D. Speeds on-site should be restricted to 15 mph for all heavy vehicles.
 - E. All machinery should be kept in good working order, especially mufflers to ensure quiet operation.
 - F. The volume of backup warning devices should be minimized while still meeting OSHA (Occupational Safety and Health Administration) standards. OSHA standards require that the backup warning device must "be clearly audible in its operating environment." This allows the warning device to be turned down as long as it can be clearly heard in its environment.
- 11. The applicant shall notify the Maryland National Capital Park and Planning Commission (M-NCPPC), Environmental Planning Section and Prince George's County Department of Permitting, Inspections and Enforcement (DPIE), prior to the start of reforestation for this mining operation and schedule a meeting with M-NCPPC and DPIE to address reforestation and woodland conservation issues.
- 12. Prior to the start of work in any phase or portion thereof, the limits of disturbance for that phase or portion thereof shall be staked on the ground or flagged on the existing trees. The applicant or their representative shall walk the limits of disturbance with an inspector of the Prince George's County Department of Permits, Inspections, and Enforcement (DPIE), prior to the installation of sediment/erosion control measures and tree protective devices.
- 13. Prior to certification of the Special Exception, the Tree Canopy Coverage schedule shown on the Plat of Special Exception Site and Landscape Plan shall be revised to show the tree canopy requirement based on the gross tract area of the site and to demonstrate how the resulting requirement will be met.
- 14. Prior to certification of the special exception, a copy of the approved sediment and erosion control plan shall be submitted to M-NCPPC.
- 15. Prior to commencement of the mining operation, a special permit shall be obtained from Prince George's County Department of Permitting, Inspections, and Enforcement (DPIE) to ensure compliance with the grading plan approved under Section 27-410(a)(3) of the Zoning Ordinance. The permit shall require the applicant to post a bond acceptable to the County Attorney to secure its obligations pertaining to reforestation and landscaping as required by this Special Exception.

16. The area to be mined shall be reclaimed in accordance with the Reclamation Plan by filling it with acceptable materials as described in Prince George's County Building Code.

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Countywide Planning Division Transportation Planning Section

301-952-3680

January 16, 2025

MEMORANDUM

TO: Todd Price, Development Review Division

FROM: Benjamin Patrick, Transportation Planning Section, Countywide Planning Division

VIA: Noelle Smith, AICP, Transportation Planning Section, Countywide Planning Division

Crystal Saunders Hancock, Transportation Planning Section, Countywide Planning Division

SUBJECT: SE-22007: Gas Light III Surface Mining

Proposal:

The subject application proposes the expansion of an existing surface mining operation consisting of 328.02 acres in the Agriculture-Residential (AR) zoning district under the current zoning ordinance and Residential-Agriculture (R-A) zoning district under the prior zoning ordinance. The property is located on the south side of MD 373 (Accokeek Road) west of its intersection with Danville Road. The Special Exception (SE) application is subject to and was reviewed using the standards of Section 27 of the prior Zoning Ordinance.

Prior Conditions of Approval

Adjacent to the subject site is an existing sand and gravel mine that is operating in accordance with SE-4651. Access to the existing mine is provided via a driveway along the south side of MD 373 approximately 600 feet to the west of McKendree Road. This access point is shared by an existing and operational wet processing facility for sand and gravel approved under SE-4790. The applicant states that all hauling of extracted material will occur on the subject site, with the material to be transported to the off-site wet processing facility by means of a conveyor system.

The wet processing facility is subject to a trip cap pursuant to SE-4790. The applicant is operating another surface mine on the adjacent property to the east, approved under SE-4647, which also uses the conveyor system to transport the material extracted from that mining operation. The applicant states that the mining within SE-4647 will be completed prior to the commencement of mining on the subject site.

The wet processing facility will continue to be subject to the trip cap established under SE-4790, where it was determined the site would generate 56 AM and 56 PM peak hour vehicle trips or daily truck traffic of 560 trucks. Being that all materials from the subject site will pass through the existing wet processing facility, the trips associated with the proposal will effectively be subject to the trip cap condition of SE-4790.

SE-22007: Gas Light III Surface Mining January 16, 2025 Page 2

Neither the Transportation Review Guidelines (TRG) nor the Institute of Transportation Engineers (ITE) *Trip Generation* contain trip generation rates for mining operations. The applicant performed traffic counts at the site access of the existing mine operating pursuant to SE-4647 to determine the impact of the proposed development. The associated trips were observed to be employees, supervisors, maintenance vehicles, and fuel trucks. Based on the peak hour turning movement counts, the subject site is expected to generate 21 AM peak hour trips and 12 PM peak hour trips. Due to the nature of the mining operations, the projected level of traffic generated by the proposed special exception will be no greater than those volumes currently experienced from the combined operations of SE-4647 and SE-4790.

The traffic study was completed per the requirements of Section 27-410 of the Zoning Ordinance, which requires that the study "shall include the volume of traffic expected to be generated by the operation, and shall identify the streets to be used between the site and the nearest street (to be used) that has a minimum paved width of twenty-four (24) feet for the predominant length of the street."

The required traffic analysis dated September 2024, has been submitted with the application and it has been reviewed. The findings and recommendations summarized below are based upon a review of these and other relevant materials and analyses conducted by the staff. The study has been referred to the Maryland State Highway Administration (SHA), the Department of Public Works and Transportation (DPW&T), and the Department of Permitting, Inspections and Enforcement (DPIE). None of the agencies have offered comments to date; any comments received will be addressed and added to the records by the transportation planning staff when received.

Master Plan Compliance

The subject property is governed by the approved 2009 *Approved Countywide Master Plan of Transportation* (MPOT) as well as the 2013 *Approved Sub Region 5 Master Plan and Sectional Map Amendment.*

Master Plan Right-of-Way

The subject site has frontage along MD 373 (A-55), an arterial roadway that is proposed as a four-to six-lane facility with a recommended right-of-way of 120 feet right-of-way. MD 373 is paved with a minimum width of 24 feet between the proposed site access and MD 5, the route that vehicles accessing the site are expected to utilize.

Master Plan Pedestrian and Bike Facilities

MD 373 is designated as a shared road facility. The MPOT provides policy guidance regarding multimodal transportation and the Complete Streets element of the MPOT recommends how to accommodate infrastructure for people walking and bicycling.

Policy 2: All road frontage improvements and road capital improvement projects within the Developed and Developing Tiers shall be designed to accommodate all modes of transportation. Continuous sidewalks and on-road bicycle facilities should be included to the extent feasible and practical.

SE-22007: Gas Light III Surface Mining

January 16, 2025

Page 3

Policy 4: Develop bicycle-friendly roadways in conformance with the latest standards and guidelines, including the 1999 AASHTO *Guide for the Development of Bicycle Facilities*.

Policy 5: Evaluate new development proposals in the Developed and Developing Tiers for conformance with the complete streets principles.

The 2013 *Approved Subregion 5 Master Plan* recommends the following facilities:

On-road dual-route bicycle facilities: Accokeek Road

The 2013 *Approved Subregion 5 Master Plan* describes on-road dual-route bicycle facilities on page 115 as follows:

Dual routes are roads that contain an off-road bicycle and pedestrian facility and an on-road bicycle facility. An appropriate on-road component of a dual-route facility would be a shared-use roadway, where the bicyclist shares the road with vehicles or a painted bike lane. Even a wide, outside curb lane or a paved road shoulder can be used by bicyclists. Off-road components of a dual-route facility would be either a side path or a wide sidewalk that could be used by bicyclists, equestrians, and pedestrians.

Comment: Staff recommends pavement markings and signage along the frontage to accommodate the bicyclist movement.

Analysis of Traffic Impacts

Existing Conditions

The subject property is currently unimproved and is located within Transportation Service Area (TSA) 3, as defined in the *Plan Prince George's* 2035 *Approved General Plan*. As such, the subject property is evaluated according to TSA 3 with the following standards:

Links and Signalized Intersections: Level of Service (LOS) C, with signalized intersections operating at a critical lane volume (CLV) of 1,300 or better and links at a volume to capacity (V/C) ratio of 0.65 or less. Mitigation per Section 24-124(a)(6) of the Subdivision Regulations, is permitted at signalized intersections within any TSA subject to meeting the geographical criteria in the TRG.

The traffic generated by the proposed use would impact the following roadway links in the transportation system:

- MD 373 between McKendree Road and MD 5
- MD 373 between the site access and McKendree Road

While the subject site is located within TSA 3, the roadway link along MD 373 between McKendree Road and MD 5 is located within TSA 2. The maximum allowable V/C for road links in TSA 2 is 0.845 and a CLV of 1,450 or better.

Access to the site is proposed via a driveway from MD 373 just west of Danville Road. MD 373 is a two-lane state-maintained highway traveling in an east-west direction. MD 373 has lane widths ranging from 11 feet to 12 feet and shoulders ranging from 0 feet to 2 feet. At no point is the pavement width along this link less than 24 feet. The majority of the link of MD 373 is posted at 40 miles per hour. Between McKendree Road and MD 5, MD 373 has a rural cross section, with a well-maintained centerline and pavement edge markings; passing is permitted along portions of this section. MD 373, adjacent to the site is a master plan arterial roadway. The ultimate right-of-way has not been dedicated to date; however, all grading activity is located outside of the ultimate right-of-way.

A second access point is proposed to connect to an existing access haul road on the adjacent site. This access point is limited to internal haul roads and associated mining activity. The proposed access point is located in the southeast corner of the subject site, near the proposed location for the conveyor system for transporting raw material to the wet processing facility. This access point was not included in the traffic study as there are no impacts to the adjacent roadway and all trips associated with this access are internal to the site.

EXISTING TRAFFIC CONDITIONS							
<u>Roadway Link</u>	<u>V/C Ratio</u>		Level of Service				
	<u>(AM & PM)</u>		(Pass & Fail)				
MD 373 from the site access and McKendree Road	0.27	0.31	Pass	Pass			
MD 373 from McKendree Road to MD 5	0.24	0.33	Pass	Pass			
*Links are analyzed to determine a volume-to-capacity ratio, or V/C, with the appropriate LOS given per the Guidelines.							

A review of the Maryland State Highway Administration (SHA) traffic database has revealed an annual growth rate in traffic along MD 373 between MD 5 of 1.0 percent. This rate of traffic growth is unrelated to the subject application and would be assumed to occur regardless of the status of the subject application.

Staff has identified all approved developments within the immediate area of the link under study. While there is an approved Preliminary Plan of Subdivision for Estates at Pleasant Valley, the property has since been rezoned and is the subject of an approved Comprehensive Design Plan and Specific Design Plan for infrastructure only. There is no approved Preliminary Plan of Subdivision therefore, the site would not meet the criteria to be included as a background development. However, staff have included the approved dwelling units for the purposes of this analysis in order to provide a more comprehensive analysis of future impacts of the subject application. Those identified developments would directly affect the link under study, and would include the following:

- Michael's Retreat: 155 single-family attached dwelling units
- Estates at Pleasant Valley: 323 single-family detached dwelling units

Collectively, the background developments could generate 351 (70 inbound, 281 outbound) AM peak hour trips and 415 (272 inbound, 143 outbound) PM peak hour trips. To determine the impact on the transportation network in the future, two years' worth of growth is applied to the traffic

Page 5

counts. The projected traffic from the background developments is added to the estimated future traffic, and the results are analyzed using the methodologies outlined in the TRG. Background traffic conditions along the critical link are summarized in the following table. Were the subject site to be otherwise developed, the impacts of the development would have to be tested for transportation adequacy during a different process.

BACKGROUND TRAFFIC CONDITIONS							
<u>Roadway Link</u>	<u>V/C Ratio</u>		Level of Service				
	(AM)	<u>& PM)</u>	(Pass & Fail)				
MD 373 from the site access and McKendree Road	0.27	0.33	Pass	Pass			
MD 373 from McKendree Road to MD 5	0.39	0.36	Pass	Pass			
*Links are analyzed to determine a volume-to-capacity ratio, or V/C, with the appropriate LOS given per the Guidelines.							

The analyses of the proposed mining application were predicated on two significant operational assumptions. Those assumptions are as follows:

- All extracted materials will be transported on-site to a conveyor system. The conveyor system would transport the materials to a wash plant currently operating under Special Exception SE-4790. Aside from the conveyor system, there is no haul route for this site.
- Traffic to and from the site will be limited to employees and visitors to the site.

There are six employees and managers expected on the site. Visitors to the site include water and fuel trucks (four and one per day respectively) and any needed service vehicles (estimated one per day, but on an as-needed basis). It is assumed that the visitors generate two trips in and two trips out during each peak hour, while employees would generate six trips in during the AM peak hour and six trips out during the PM peak hour.

The total projected traffic volumes were obtained by combining the site-generated trips with the projected future condition without the subject application, which includes reasonable growth in existing traffic and traffic that would be generated by approved background development. The resulting projected future traffic conditions for the critical intersections are summarized in the table below:

TOTAL TRAFFIC CONDITIONS							
<u>Roadway Link</u>	<u>V/C Ratio</u>		<u>Level of Service</u>				
	<u>(AM & PM)</u>		(Pass & Fail)				
MD 373 from the site access and McKendree Road	0.27	0.33	Pass	Pass			
MD 373 from McKendree Road to MD 5	0.39	0.36	Pass	Pass			
*Links are analyzed to determine a volume-to-capacity ratio, or V/C, with the appropriate LOS given per the Guidelines.							

Given that the mining of the subject site will not commence until mining has been completed in SE-

SE-22007: Gas Light III Surface Mining January 16, 2025 Page 6

4647, there are no trips to be added to represent total traffic; the trips associated with the use are already on the road and can be assumed to have been captured in the updated traffic counts. Therefore, background and total Traffic would be identical. That being said, staff performed an additional analysis that assumed all trips associated with the current proposal were new trips on the network. The results of this additional analysis found that there was no change in the projected volume-to-capacity (V/C) ratio reported in the table above.

The results of the study show that both study links of MD 373 adjacent to the site operate acceptably under existing, background, and future conditions for the subject site.

Transportation Planning Review:

Zoning Ordinance Compliance

Section 27-410 of the Prince George's County Zoning Ordinance (Ordinance) details the required findings for a special exception. For the purposes of transportation review, Section 27-410(7) are copied and analyzed below:

Section 27-410

(7) Driveways or access points shall be identified on the site plan, and shall be located so as not to endanger pedestrians or create traffic hazards. The surface material to be used on the driveways shall be identified on the site plan. Any access driveway shall be at least twenty-two (22) feet wide, and shall be paved for a distance of at least two hundred (200) feet from the boundary line of the Special Exception.

Comment: The entrance from Accokeek Road will be paved to a width of twenty-two (22) feet, and it will have a paved length of two hundred (200) feet as shown on the plan, thereby satisfying this requirement.

Conclusion

The Transportation Planning Section finds that the proposed sand and gravel wet processing plant use would meet the requirements of Subtitle 27 for the approval of a Special Exception from the standpoint of transportation. Approval should be subject to the following conditions:

- 1. All extracted materials will be transported off-site by means of a conveyor system to a neighboring wash plant.
- 2. Traffic to and from the site will be limited to employees and visitors to the site.
- 3. Provide shared lane markings and bicycle signage along the frontage of MD 373 unless modified by the permitting agency.

Planning Department



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August 21, 2024

MEMORANDUM

TO: Todd Price, Planner II, Zoning Section, Development Review Division

VIA: N. Andrew Bishop, Planner III, Placemaking Section, Community Planning

Division

VIA: Kierre McCune, Supervisor, Master Plans and Studies Section, Community

Planning Division

FROM: Michael D. Calomese, AICP, Planner III, Master Plans and Studies Section,

Community Planning Division

SUBJECT: SE-22007 GAS LIGHT III SURFACE MINE

FINDINGS

The Community Planning Division finds that, pursuant to Section 27-317(a)(3) of the prior zoning ordinance, this application will not substantially impair the integrity of the 2013 *Approved Subregion 5 Master Plan*.

Section 27-317(a)(3) of the prior zoning ordinance states that a Special Exception may be approved if the proposed use will not substantially impair the integrity of any validly approved Master Plan or Functional Master Plan, or, in the absence of a Master Plan or Functional Master Plan, the General Plan.

BACKGROUND

Application Type: Special Exception for a surface mining operation in the Residential-

Agricultural (R-A) zone.

Planning Area: 85A

Community: Brandywine

Location: On the south side of Accokeek Road, about 3,850 feet west of the

intersection of Accokeek Road and McKendree Road

Size: 350.42 acres

Existing Use: Wooded

SE-22007 Gas Light III Surface Mine, Page 2

Future Land Use: Rural

Proposal: Special Exception for surface mining operation pursuant to the prior

zoning ordinance.

Zoning: Agricultural-Residential (AR)

Prior Zoning: Residential-Agricultural (R-A)

Applicable Zoning Ordinance: Prior

Character of the Neighborhood: The property is wooded and undeveloped. The site is

west of an existing sand and gravel mining

operation and northeast of a specialty waste company.

GENERAL PLAN, MASTER PLAN, AND SMA

General Plan: The 2014 *Plan Prince George's 2035 Approved General Plan* (Plan 2035) places this application in the Rural and Agricultural Areas (Map 11: Growth Policy Map, p. 107). The vision for Rural and Agricultural Areas is to serve as locations for low-density residential units or to support park and open space land uses and focus new investment on maintaining existing infrastructure and stabilizing small-scale neighborhood-oriented commercial activities that support the areas' rural lifestyle and character. Plan 2035 recommends continuing to protect these areas in order to preserve the agricultural sector and the land base on which it depends. (p. 20, and Map 11: Growth Policy Map, p. 107)

Master Plan: The 2013 *Approved Subregion 5 Master Plan* (Master Plan) recommends Rural land use on the subject property (Map IV-1: Future Land Use, p. 32). The proposed use conforms with the recommended land use because the Master Plan recognizes the importance of sand and gravel mining to the County and to the greater Washington, D.C. region (p. 153), while also restricting sand and gravel mining to the Rural and Agricultural Areas (p. 154), especially within the Priority Preservation Area (p. 58).

In addition, the Master Plan states the following goals, policies, and strategies to help the applicant advance the intent and purpose of the plan:

SE-22007 Gas Light III Surface Mine, Page 3

CHAPTER V: ENVIRONMENT

Strategies (p. 88)

- Continue to review proposed mining projects for impacts on the integrity of the master plan, using the following guidelines:
 - Mining operations should minimize impacts on scenic, historic, cultural, or recreational assets.
 - Post-extraction uses should support the plan's preservation goals with mined land reclaimed for agricultural and forest uses.
 - Additional considerations for post-extraction uses should be community uses such as parks and trails.

Analysis: The applicant should work with the operating agencies as appropriate, such as the Environmental Planning and Historic Preservation Sections, and Department of Parks to accommodate environmentally sensitive and sustainable design techniques for this development, and consider new community uses for the site, especially considering the environmental impact of this project to the master plan area.

CHAPTER VIII: ECONOMIC DEVELOPMENT

Goal (p. 153)

The County balances the need for the extraction of sand and gravel resources, and related activities, with the potential negative impact and nuisance to nearby properties and the environment, including restricting sand and gravel mining to the Rural Tier.

Policies (p. 154)

• Restrict sand and gravel mining to the Rural Tier, with enhanced buffering between sand and gravel mining and communities in the Developing Tier.

Strategies (p. 154)

 Ensure that sand and gravel mine applications address all impacts on surrounding communities, including requiring applicants to mitigate on and off-site transportation impacts from mining activities and potentially limiting the daily hours of mining activities and duration of sand and gravel approvals to mitigate the nuisance to nearby communities.

SE-22007 Gas Light III Surface Mine, Page 4

Analysis: Mineral extraction is an historically important industry in Subregion 5, based on the presence of large sand and gravel deposits affiliated with the Brandywine geological formation. Regionally, this industry is undergoing significant change as small mine operations are transitioning out of the industry and being replaced with larger, more consolidated operations. The mining industry supports other independent businesses in the region, predominately in the trucking industry, generating spin-offs to the local economy, though the specific amount of positive impact to the County has not been quantified in the master plan. This proposal is an expansion of an existing mining operation within a rural area. The master plan specifically restricts sand and gravel mining to rural areas, with the long-term goal of reclaiming mining sites and turning them into land that can support productive agriculture and forestry.

Aviation/MIOZ: This application is not located within an Aviation Policy Area or the Military Installation Overlay Zone.

SMA/Zoning: The 2013 *Approved Subregion 5* Sectional Map Amendment retained the subject property into the Agricultural-Residential (AR) zone.

On November 29, 2021, the District Council approved CR-136-2021, the Countywide Map Amendment (CMA) which reclassified the subject property from the AR zone to the Residential-Agricultural (R-A) zone, effective April 1, 2022.

MASTER PLAN SUBSTANTIAL IMPAIRMENT ISSUES

None

cc: Long-Range Agenda Notebook

1616 McCormick Drive, Largo, MD 20774 • pgplanning.org • Maryland Relay 7-1-1

Countywide Planning Division Historic Preservation Section

301-952-3680

October 15, 2024

MEMORANDUM

TO: Todd Price, Zoning Section, Development Review Division

VIA: Thomas Gross, Planning Supervisor, Historic Preservation Section, Countywide

Planning Division **7WG**

FROM: Tyler Smith, Historic Preservation Section, Countywide Planning Division **7A3**

Amelia Chisholm, Historic Preservation Section, Countywide Planning Division **Age** Jennifer Stabler, Historic Preservation Section, Countywide Planning Division **7AS**

SUBJECT: SE-22007 Gas Light III Surface Mine

Findings

The subject property comprises 328.02 acres and is located on the south side of Accokeek Road, approximately 6,260 feet west of its intersection with McKendree Road. The subject property was zoned Residential-Agricultural (R-A), per the prior Zoning Ordinance, and is in the 2013 *Approved Subregion 5 Master Plan and Sectional Map Amendment* area. The subject application proposes expanding an existing surface mining operation for the extraction of sand and gravel.

The 2013 Approved Subregion 5 Master Plan and Sectional Map Amendment includes goals and policies related to historic preservation (pages 66-68). However, these are not specific to the subject site or applicable to the proposed development. A search of current and historic photographs, topographic and historic maps, and locations of currently known archeological sites indicates the probability of archeological sites within the subject property is high.

A Phase I archaeology survey was conducted on the subject property in May 2024, at the request of the Maryland Historical Trust. Areas with moderate to high probability of containing archeological resources were surveyed. Areas of low probability were visually inspected and judgmentally tested to confirm soil conditions and archeological potential. A total of 817 shovel test pits were excavated during the survey.

Conclusions

The archeological survey identified six precontact Indigenous sites: 18PR1261, 18PR1262, 18PR1263, 18PR1264, 18PR1266, and 18PR1267; one historic archaeological site, 18PR1268; and one multi-component site,18PR1265, containing both precontact and historic components. Six isolated finds, consisting of four non-diagnostic precontact artifacts, and two historic artifacts, were also identified. The precontact sites consisted of small lithic scatters attributed to temporary camps dating generally to the precontact period.

The historic archeological site consisted of an abandoned, collapsing residential structure; and the multicomponent site consisted of the remains of a small farmstead that includes abandoned, collapsing structures with associated historic deposits dating from the late nineteenth century to the late twentieth century, and a single precontact artifact. Background historic research indicates that this was the farmstead of an African American owner and World War I veteran, Tolson Beale. No further work was recommended on sites 18PR1261, 18PR1262, 18PR1263, 18PR1264, 18PR1266, and 18PR1267. The late nineteenth to twentieth-century farmstead, Site 18PR1265, is located within a proposed woodland preservation area and will not be impacted by the mining operations.

Historic Preservation staff concur that no additional archeological investigations are necessary on sites 18PR1261, 18PR1262, 18PR1263, 18PR1264, 18PR1266, and 18PR1267. Staff also concurs that no additional archaeological investigations are necessary on site 18PR1265. However, if the area where site 18PR1265 is proposed for any ground disturbance in the future, then additional archeological investigations will be necessary.

Recommendation

Historic Preservation staff recommend approval of SE-22007, Gas Light III Surface Mine, with no conditions.

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December 9, 2024

MEMORANDUM

TO: Todd Price, Planner III, Zoning Section

VIA: Mridula Gupta, Acting Supervisor, Subdivision Section MG

FROM: Jason Bartlett, Planner II, Subdivision Section

SUBJECT: SE-22007; Gas Light III Surface Mine

The property subject to this Special Exception (SE) consists of 328.02 acres of land comprised of 3 parcels identified by the Maryland State Department of Assessments & Taxation (SDAT) as Parcel 19, Parcel 21, and Parcel 124, all recorded by deed in the Prince George's County Land Records in Book 34114, Page 262. This property is adjacent to a 683.26-acre tract of land owned by the applicant and previously approved for surface mining operations under SE-4651. This SE-22007 proposes to expand the overall surface mining operations to the subject property.

The property subject to this SE lies within the Agricultural-Residential (AR) Zone. However, this application has been submitted for review pursuant to the prior Prince George's County Zoning Ordinance and prior Subdivision Regulations, and the property's prior Residential-Agricultural (R-A) zoning. The application was accepted on June 28, 2024. Major issue comments were provided to the applicant during Subdivision and Development Review Committee meeting on July 19, 2024. This referral memorandum is based upon revised plans received on August 30, 2024.

There are no prior preliminary plan of subdivision (PPS) or final plat approved for the subject property. In accordance with Section 24-107(c)(7)(B) of the prior Subdivision Regulations, and because the applicant is not proposing more than 5,000 square-feet of gross floor area (GFA) with this SE application, this development is exempt from the requirement of filing a PPS or a final plat.

The property does not have a certificate of adequacy (ADQ) in accordance with Sections 24-4503(a)(1) and 24-4503(a)(3) of the Subdivision Regulations.

Additional Comments:

1. Any future development on the subject property may require approval of a preliminary plan of subdivision and final plat, prior to approval of permits.

Recommended Conditions:

1. Prior to signature approval of the Special Exception (SE), the site plan shall be modified as

follows:

a. On the cover sheet, correcting overlapping text ("PROP. PROTABLE CONVEYOR") obscuring the label for Parcel 21.

This referral is provided for the purpose of determining conformance with any underlying subdivision approvals for the subject property and Subtitle 24. All bearings and distances must be clearly shown on the special exception site plan and must be consistent with the legal descriptions, or permits will be placed on hold until the plans are corrected.

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August 30, 2024

MEMORANDUM

TO: Todd Price, Planner II, Urban Design Section

FROM: Alice Jacobs, Planning Technician III, Permit Review Section

SUBJECT: SE-22007 – Gas Light III Surface Mine

1. The Permit Review Section offers no comments on this application expand an existing surface mining site at this time.

From: Thompson, Ivy
To: Price, Todd

Cc: <u>Holley, Edward</u>; <u>Quattrocchi, Dominic</u>

Subject: Fw: Eplan Referral for SE-22007 GAS LIGHT III SURFACE MINE

Date: Friday, December 13, 2024 11:59:27 AM

Attachments: SE-22007 Case Report.pdf

image002.png image003.png image004.png image005.png image006.png image007.png image008.png PBS SE-22007.pdf CIVP-SE-22007.pdf Outlook-p2wol4uh.png Outlook-rjrojvja.png Outlook-yymc52o2.png Outlook-uo0aeuxb.png Outlook-43aktlk3.png Outlook-rcxjwvuz.pnq Outlook-gagxkxpa.png Outlook-ukyt35bh.png

Good afternoon Todd:

SE-22007 Gas Light III Surface Mine is a Special Exception for the expansion of an existing surface mining operation. There are no M-NCPPC-owned, DPR managed properties adjoining or adjacent to the subject property. Per the Subregion 5 Master Plan, pages 139-140, there are recommendations to expand the Gardener Road Park located north of the property. DPR would like first consideration for acquisition if and when the current use ceases operation at the property.

Please accept this email in-lieu of a formal memorandum.

Best.

lvy

Ivy R. Thompson, AICP, Planner III

Park Planning and Environmental Stewardship
M-NCPPC, Department of Parks and Recreation, Prince George's County
Park and Recreation Administration Building

6600 Kenilworth Avenue, 3rd Floor, Riverdale, MD 20737

Office: 301-699-2540 | Mobile: 202-430-2106

co·or·di·nate *verb* /kō'ôrdəˌnāt/ bring the different elements of (a complex activity or organization) into a relationship that will ensure efficiency or harmony.

Stay connected:



THE PRINCE GEORGE'S COUNTY GOVERNMENT

Department of Permitting, Inspections and Enforcement Site/Road Plan Review Division



MEMORANDUM

October 1, 2024

TO: Todd Price, Subdivision Review Section

Development Review Division, M-NCPPC

FROM: Rey de Guzman, P.E., Acting Associate Director

Site/Road Plan Review Division, DPIE Reynaldo de Guzman

Re: Gas Light III Surface Mine

SE-22007

CR: Accokeek Road CR: McKendree Road

This memorandum is in response to Case SE-22007; Gas Light III referral, amendment to Special exception (SE-4651) for the purpose of expanding an existing surface mining operation of sand and gravel in accordance with Sections 27-317, 27-323 and 27-410 of the prior zoning ordinances. The Department of Permitting, Inspections and Enforcement (DPIE) offers the following:

- The property is in Brandywine Maryland, located on the south side of Accokeek Road, approximately 3,850 feet West of the intersection of Accokeek Road and McKendree Road.

Background Information:

 Accokeek Road is a State-maintained roadway. The Applicant shall coordinate right-ofway dedications and construct roadway/frontage improvements as required in accordance with the Maryland State Highway Administration (MSHA) as determined necessary.

Traffic Impact Analysis (TIA) Review Comments:

 The roadway studied as part of this Special Exception is under the jurisdiction of the Maryland Department of Transportation State Highway Administration (MDOT SHA), as such, we defer all comments to the MDOT SHA.

Water and Sewer Plan:

- The 2018 Water and Sewer Plan designates the subject property in Water and Sewer Category 6, outside the Sewer Envelope, in the Rural and Agricultural Tier, and within Tier 4 under the Sustainable Growth Act not planned or zoned for public sewer service; planned for conservation. The aerial view reflects undeveloped land.
- Any development in the Rural and Agricultural Tier is to occur on private wells and septic systems.
- DPIE determines the validity of category designations of the Prince George's County Water and Sewer Category Maps. Information reflects the category designated by the 2018 Water and Sewer Plan and its amendments deemed accurate as of January 5, 2024. Any dispute of the designated category or comments herein may be addressed to the Site/Road Plan Review Division, Water and Sewer Plan Coordinator, at 301.636.2060.
- The applicant is to file a Site Development Concept application with DPIE for review and approval.
- DPIE has no objection to Special Exception No. 22007.

If you have any questions or need additional information, please contact Mr. Nanji Formukong, District Engineer for the area, at 301.636.2060.

RD: SK/NF:AG

cc: Mariwan Abdullah, P.E., Acting Chief, S/RPRD, DPIE
Rene Lord-Attivor, Chief, Traffic Engineering, S/RPRD, DPIE
Nanji Formukong, District Engineer, S/RPRD, DPIE
Salman Babar, CFM, Engineer, S/RPRD, DPIE
Yonas Tesfai, P.E., Engineer, S/RPRD, DPIE
Holcim - Mar, Inc., 6401 Golden Triangle Drive, Suite 400 Greenbelt MD 20770
McNamee Hosea, P.A. 6404 Ivy Lane, Suite 820 Greenbelt, MD 20770

AGENDA ITEM: 4D AGENDA DATE: 2/20/2025

ENVIRONMENTAL IMPACT REPORT SAND AND GRAVEL MINING PROPOSAL

SE-22007



PREPARED BY

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION COUNTYWIDE PLANNING DIVISION - ENVIRONMENTAL PLANNING SECTION

> **1616 McCORMICK DRIVE LARGO, MD 20774**

> > **JANUARY 23, 2025**

ENVIRONMENTAL IMPACT REPORT

SAND AND GRAVEL MINING PROPOSAL

SE-22007

Impact Evaluation Team

Environmental Planning Section Thomas Burke, Team Leader Alwin "Chuck" Schneider, B.S. Megan Reiser, M.S. Suzanne Nickle Maureen Farrington

Transportation Planning Section Crystal Hancock Benjamin Patrick

Historic Preservation Section Jennifer Stabler, PhD



Environmental Impact Report for SE-22007

Prepared By

The Maryland-National Capital Park and Planning Commission
Countywide Planning Division – Environmental Planning Section
1616 McCormick Drive
Largo, MD 20774

JANUARY 2025



SE-22007 Site photo taken on 11/27/2024 by Chuck Schneider

Table of Contents

EXECU	UTIVE SUMMARY	8
1.0	INTRODUCTION	10
1.1	Background	10
1.2	Geology of Sand and Gravel Mining	11
1.3	Special Exception Evaluation Criteria and Process	11
2.0	Study Purpose and Approach	14
3.0	Existing Environment	17
3.1	Site Description	17
3.2	Community Description	17
4.0	Alternatives Analysis	19
4.1	The Proposed Mining Activity	20
4.2	No-project Alternative	22
4.3	Alternative Development Potential	22
4	.3.1 Land	22
4	.3.2 Water	23
4	.3.3 Air	23
4	.3.4 Biota	23
4	.3.5 Human-Related	23
5.0	FUTURE CONDITIONS WITHOUT MINING	25
5.1	Land	25
5	.1.1 Geology	25
5	.1.2 Soils	26
5.2	Water	
5	.2.1 Drainage, Runoff and Floodplain	
5	.2.2 Surface Water	29
5	.2.3 Groundwater	31
5.3	Climatology and Air Quality	34
	.3.1 Climatology	
5	.3.2 Air Quality	35
5.4	Biota	43
	.4.1 Woodlands	
5	.4.2 Streams and Wetlands	
5	.4.3 Flora and Fauna	
5	.4.4 Rare, Threatened, and Endangered Species	48

5.5	Human-Related	48
5	5.5.1 Transportation	48
5	5.5.2 Noise	51
5	5.5.3 Visual Aesthetics	55
5	5.5.4 Scenic and Historic Roads	57
5	5.5.5 Historic Resources	59
5	5.5.6 Mount Vernon Viewshed Area of Primary Concern	61
6.0	MITIGATION OF ADVERSE IMPACTS	
6.1	Land	
6.2	Water	
6.3		
6.4		
6.5		
	5.5.1 Transportation	
	5.5.2 Noise	
	5.5.3 Visual Aesthetics	
	NDIX A	
APPE!	NDIX B	76
	LIST OF FIGURES	
1.1	Aerial Photograph of SE-22007 and Vicinity	12
1.2	Geology of Prince George's County	13
1.3	Area Mines and Wash Plants	16
5.1	Aquifer Cross Section	34
5.2	Air Quality Monitoring Data	
	LIST OF TABLES	
4.1	Phasing Plan	19
4.2	Predicted Impact of Mining on Environmental Elements	
4.3	Properties Within a Quarter Mile of the Subject Site with Wells	
5.1	Existing Soils	
5.2	Water Quality Rating	
5.3	National Ambient Air Quality Standards	
5.5	6	

5.4	PM-10 Emissions	41
5.5	PM-2.5 Emissions	42
5.6	Existing Traffic Conditions	49
5.7	Background Traffic Conditions	50
5.8	Total Traffic Conditions	51
5.9	Summary of Visual Impacts from Critical Viewpoints	56
5.10	Evaluation of Visual Impacts on Historic/Scenic Roads	58

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EXECUTIVE SUMMARY

This Environmental Impact Report (EIR) presents the findings and recommendations of an environmental impact evaluation prepared by the The Maryland-National Capital Park and Planning Commission (M-NCPPC); Environmental and Transportation Planning Sections for a proposed sand and gravel mining operation located on the south side of Accokeek Road, approximately 1,510 feet west of the Accokeek Road and Dansville Road intersection in the southern part of Prince George's County. The subject property totals 351.29 acres, and the proposed mining will result in the clearing and grading of approximately 230.45 acres, including 227.44 acres of woodland.

This EIR has been prepared in accordance with Maryland Land Use Code § 25-209, which requires that the report evaluate the impacts of the proposed mining activities on:

- Noise
- Watershed and water quality
- Airshed and air quality
- Traffic and traffic safety
- Any other environmental factors relating to the health, safety, and welfare of the residents of the affected area.

The evaluation criteria are set forth in Section 27-532.01 of the Zoning Ordinance and by the District Council.

This EIR contains a profile of the study area's existing physical, environmental, and natural habitat elements. The presentation includes the physical features, which include land, water, climate, air, and noise, followed by the biological descriptors (flora and fauna), a forest stand delineation, the area's aesthetics and historic resources, and transportation. Another feature of the EIR is an analysis of the Type 2 Tree Conservation Plan for conformance with the Prince George's County Woodland Conservation and Tree Preservation Ordinance.

Alternatives analyses, including the proposed mining activity, a no-project alternative, and alternative development potential, are provided in Section 4.0. An in-depth resource impact evaluation of each of the environmental elements with respect to the potential impacts of the sand and gravel mining operation is provided in Section 5.0. Proposed mitigation measures are provided in Section 6.0. Recommended conditions of approval will be provided as part of the special exception review and are not included in this EIR.

The following is a summary of the anticipated impacts of the proposed mining operation:

- 1. The mining activity is proposed to include the following tasks for each phase in the order listed: removal of vegetation; removal of topsoil and placement in berms or stockpiles; excavation of materials using excavators; movement of materials on-site using bulldozers and dump trucks; and hauling of materials to on-site proposed elevated conveyor to transport material to adjacent off-site Gaslight I wash plant. No on-road hauling on Accokeek Road is proposed.
- 2. The proposed mining will require the approval of an erosion and sediment control plan containing devices (traps/ basins) to control soil erosion and stream sedimentation.

- 3. The depth of mining is not expected to alter ground water levels because mining is not proposed to occur to a depth below the existing water table. No impacts to surrounding wells are anticipated; however, the applicant has committed to providing new wells for any property owner within a quarter mile whose well is negatively affected by the mining.
- 4. The proposed mining of sand and gravel from the subject property is not expected to have any adverse impacts on the climatology of the immediate area or of the surrounding area.
- 5. The particulate matter levels at the site are proposed to be below the National Ambient Air Quality Standards (NAAQS) for both PM_{10} (larger "coarse" particles) and $PM_{2.5}$ (smaller "fine" particles).
- 6. Minor impacts to regulated environmental features, such as a stream and its stream buffer for an elevated conveyor system and access road are necessary to address the regulations of the County and state code.
- 7. Woodland conservation reforestation planting is required on-site to meet the threshold requirements of the Woodland and Wildlife Habitat Conservation Ordinance.
- 8. On-site reforestation will happen after all mining phases are completed and final grades are established.
- 9. No off-site hauling is proposed. Instead, a proposed overhead conveyor system is proposed to connect the site with the existing processing facility (Gaslight I) located to the southeast.
- 10. Mining operations on the site are restricted to the hours allowed from 7 a.m. to 7 p.m. Monday through Friday and 7 a.m. to 4 p.m. on Saturdays, excluding federal holidays. There are no operations on Sundays.
- 11. Berms are proposed along the Accokeek Road portions of the property boundary of the subject site for noise mitigation purposes. Noise levels are expected to meet the Code of Maryland Regulations residential noise limit (65 dBA) at the property boundary.
- 12. The post-mining reclamation and the installation of landscaping and reforestation will provide long-term water quality benefits and provide habitat value to the site.
- 13. The rural historic landscape along Accokeek Road, as well as the visibility of the mining operation from dwellings or structures within the potential viewshed of the application, are not expected to be significantly affected. There will be a 90-foot width of woodland clearing off Accokeek Road for an employee entrance only.
- 14. No rare, threatened, or endangered species are located within the proposed mining area.
- 15. No anticipated impacts to the adjacent historic character of the setting of the historic resources.

1.0 INTRODUCTION

1.1 Background

An application has been filed for a special exception to the Zoning Ordinance to surface mine sand and gravel from a 351.29-acre site, of which 230.45 acres will be mined (SE-22007). The site is located on the south side of Accokeek Road just 1510 feet west of the Accokeek Road and Dansville intersection (Figure 1.1).

Pursuant to this application, submitted by Holcim-MAR, Inc., under state law Maryland Land Use Code (§ 25-209), an EIR must be prepared by the Environmental Planning Section of the Maryland-National Capital Park and Planning Commission (M-NCPPC) Annotated Code of Maryland: Article 28, Section 8-110). The law requires that the report evaluate such an application comprehensively by determining the impacts of the proposed mining activities on:

- Noise
- Watershed and water quality
- Airshed and air quality
- Traffic and traffic safety
- Any other environmental factors relating to the health, safety, and welfare of the residents of the affected area.

The evaluation contained in this EIR was performed by a team of specialists in the Environmental Planning, Transportation Planning, and Historic Preservation Sections of the M-NCPPC Planning Department. The information provided by the applicant to further evaluate and review the mining special exception includes the following:

- 1. "Phase I Archaeological Survey Gaslight III Proposed Surface Mine" by TRC Environmental Corporation dated May 2024, received on August 21, 2024.
- 2. "Gaslight III Special Exception Traffic" by Lenhart Traffic Consulting, Inc., dated September 5, 2024, received on September 5, 2024.
- 3. "Hydrologic Impact Evaluation" by GTA dated October 4, 2024, received on October 7, 2024.
- 4. "Evaluation of Air Quality Impacts for Proposed Sand & Gravel Surface Mining of Gaslight III Property" by Jenkins Environmental, Inc., dated March 13, 2024, received on June 6, 2024.
- 5. "Environmental Noise Assessment Sand and Gravel Extraction Gaslight III Quarry Site" by Staiano Engineering, Inc., dated March 4, 2024, received on June 6, 2024.
- 6. "Viewshed Cross Section" by Atwell, dated December 2022, received on August 30, 2024.
- 7. Unapproved "Type 2 Tree Conservation Plan (TCP2-033-2024) Gaslight III" by Atwell, dated March 2024.
- 8. Approved Natural Resource Inventory (NRI-133-2022) plan and Forest Stand Delineation by Atwell dated May 2022, approved August 18, 2022.
- 9. "Plat of Special Exception Site and Landscape Plan– Gaslight III" by Atwell, dated December 2022.
- 10. Unapproved "DPIE 55642-2024-SDC Site Development Concept Plan Gaslight III" by Atwell, dated May 2024.

1.2 Geology of Sand and Gravel Mining

Prince George's County lies almost entirely within the Atlantic Coastal Plain, with extensive sand and gravel deposits present within its geologic formations. Major deposits in the County are found in a geologic formation known as the Patuxent Formation in the northwest portion of the County and in the Brandywine Formation in the south (Figure 1.2). The Patuxent Formation has been considerably depleted in the County, while extensive sand and gravel deposits are still present in the Brandywine Formation. This geologic unit occurs as a shallow blanket of coarse sediments, 20 to 40 feet thick, and covers the plateau-like level surface of southern Prince George's County (USDOI, Geological Survey, 1955). The Brandywine Formation has become the major source of sand and gravel in the County, as evidenced by the number of active sand and gravel mining sites.

Sand and gravel resources are considered valuable natural resources that should be extracted prior to establishing other uses of a property. Throughout the County sites that contain these natural resources have been mined and then developed for other uses ranging from residential, commercial, and industrial to wetland preserves.

Minerals are defined in the <u>Annotated Code of Maryland</u>, <u>Environment Article</u>, <u>Title 15</u>, <u>Subtitle 801</u> (i): "Minerals mean any solids material, aggregate, or substance of commercial value, whether consolidated or loose, found in natural deposits on or in the earth, including clay, diatomaceous earth, gravel, marl, metallic ores, sand, shell, soil, and stone. The term does not include coal."

1.3 Special Exception Evaluation Criteria and Process

General criteria governing all special exception applications are set forth in Sections 27-317 and 27-410 of the Zoning Ordinance for Prince George's County.

The required findings will be evaluated in the technical staff report that is prepared in conjunction with the special exception case. In addition, the inventory of active sand and gravel mines required in Section 27-410(a)(8) and provided in Appendix A is considered.

The Zoning Hearing Examiner and District Council use the findings of the EIR and the technical staff report as they deliberate on the merits of a special exception application for surface mining. If a hearing by the Planning Board is requested by any party, the Planning Board provides the Zoning Hearing Examiner with a recommended action that the Zoning Hearing Examiner may accept, deny, or modify. The Zoning Hearing Examiner's decision may then be appealed to the District Council, who may also accept, deny, or modify the Zoning Hearing Examiner's decision.

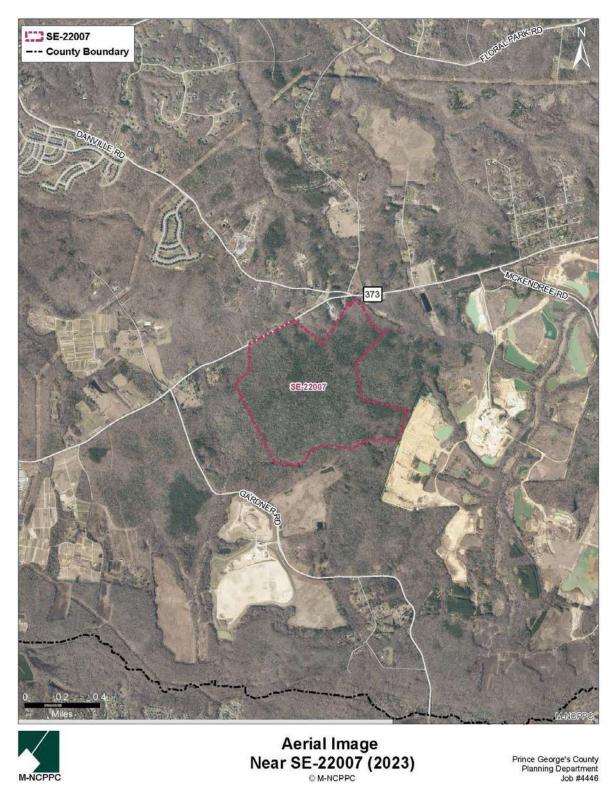


Figure 1.1 Aerial photograph of SE-2207 and vicinity

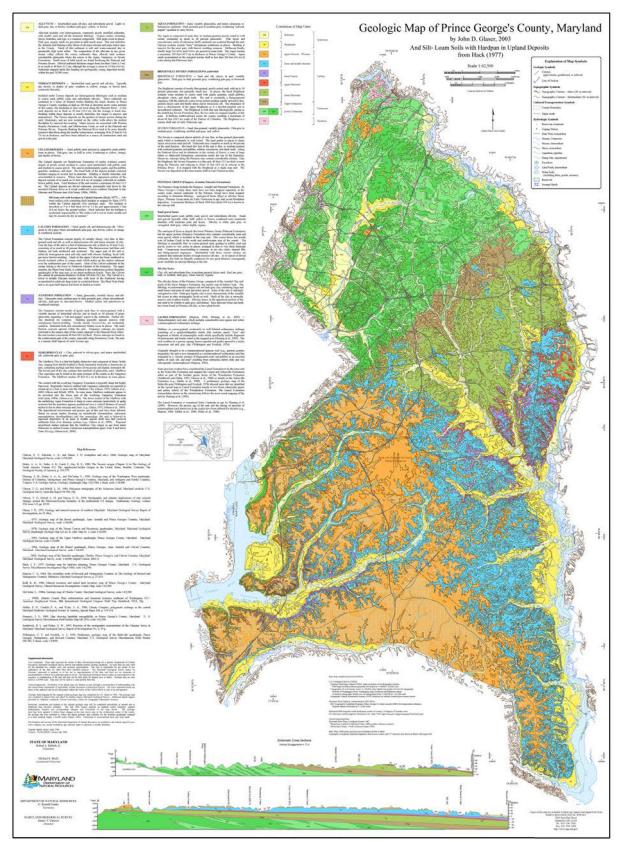


Figure 1.2 Geology map of Prince George's County (Maryland Department of the Environment)

2.0 STUDY PURPOSE AND APPROACH

The overall purpose of this EIR is to provide an evaluation of the potential environmental impacts of the proposed mining activity as required by state law.

The principal objective of this EIR is to provide information to decision-makers in sufficient detail to answer the following questions:

- 1. Will the proposed use adversely affect the health, safety, and welfare of residents or workers in the area above accepted levels or standards?
- 2. Will the proposed use be detrimental to the use and/or development of adjacent properties or the general neighborhood, and if so, could the impacts be mitigated?
- 3. What issues should be addressed in conditions of approval of the application to mitigate the impacts proposed?

The evaluation contained in this EIR was performed by a team of professionals in The Prince George's County M-NCPPC Countywide Planning Section. The description of the existing environmental features was based on information obtained from data collection, site visits, studies provided by the applicant, literature review, and the letter of justification submitted with the subject application. The existing physical environmental features such as geology, soils, water (drainage and runoff, water quality, sediment, ground water), forest cover, noise, and climatology and air quality were examined and are described in this EIR. Likewise, biological resources of the area (woodlands, streams and wetlands, flora and fauna, and rare, threatened, and endangered species), as well as human-related resources (transportation, noise, and visual aesthetics), were identified. The impacts upon land, water, woodlands, air, noise, biological resources, and aesthetics as a result of the proposed mining activity were determined and quantified where possible by using scientific methodologies, including modeling. The magnitude and significance of the predicted impacts were then identified and discussed. Potential adverse impacts from the mining activity and potential mitigation measures have also been presented.

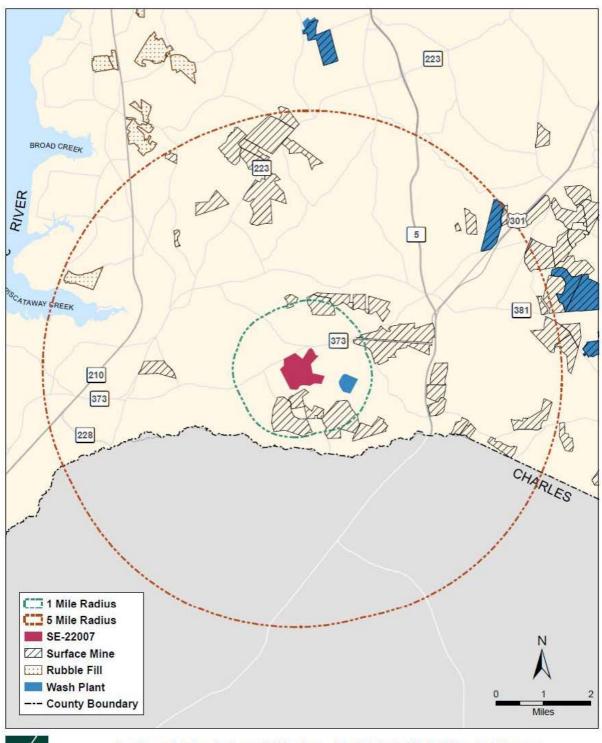
A special exception may be approved if:

- 1. The proposed use and site plan are in harmony with the purpose of this Subtitle;
- 2. The proposed use is in conformance with all the applicable requirements and regulations of this Subtitle;
- 3. The proposed use will not substantially impair the integrity of any validly approved master plan or functional master plan or, in the absence of a master plan or functional master plan, the General Plan;
- 4. The proposed use will not adversely affect the health, safety, or welfare of residents or workers in the area:
- 5. The proposed use will not be detrimental to the use or development of adjacent properties or the general neighborhood;
- 6. The proposed site plan is in conformance with an approved Type 2 tree conservation plan;
- 7. The proposed site plan demonstrates the preservation and/or restoration of the regulated environmental features in a natural state to the fullest extent possible in accordance with the requirement of Subtitle 24-130(b)(5) of County Code.

In addition to the above, the District Council shall consider the inventory required in Section 27-410(a)(8), which states: "The Technical Staff Report prepared in response to the application shall include a current, Countywide inventory of the locations, dates of approval, and conditions of approval concerning haul routes and estimated loads per day for all approved and pending special exceptions for sand and gravel wet-processing, sanitary landfills and rubble fills, and surface mining, as indicated by the record in the case. The inventory shall also include the locations of all nonconforming sand and gravel wet-processing, sanitary landfills and rubble fills, and surface mining operations throughout the County that were certified after September 6, 1974."

Figure 1.3 shows the location of all active mining sites, wash plants, municipal landfills, rubble landfills, and the proposed special exception (SE-22007). Figure 1.3 and Appendix A, which is a listing of all active sites and associated data, were prepared to meet the requirements of Section 27-410(a)(8).

These general criteria are used by the Prince George's County Planning Board, the Zoning Hearing Examiner, and District Council as they deliberate on the merits of a special exception application for surface mining. The Planning Board provides the Zoning Hearing Examiner with a recommended action that the Zoning Hearing Examiner may accept, deny, or modify. The Zoning Hearing Examiner's decision may then be appealed to the District Council, which may also accept, deny, or modify the Zoning Hearing Examiner's decision.



M-NCPPO

Active & Reclaimed Mining, Rubble Fill & Wash Plants
Within A 1 to 5 Mile Radius of SE-22007

Prince George's County
Planning Department
Job #4446

Figure 1.3 Area Mines and Wash Plants

3.0 EXISTING ENVIRONMENT

3.1 Site Description

This 351.29-acre special exception application is part of a property approximately 1,150 acres in size owned by Bardon, Inc. The site is located on the south side of Accokeek Road just 1510 feet west of the Accokeek Road and Dansville intersection. The application site, which is zoned A-R, is in a neighborhood typified by properties in the A-R zone. The surrounding properties are all zoned A-R. The properties located to the north, south, east, and west are zoned A-R. The parcel abutting the southern property boundary is developed with an existing mining area with a wash plant that is intended to be the destination for processing of the sand and gravel extracted from the subject site under the proposed mining application. The area is generally characterized by low- to medium-density residential development, resulting in a rural character in the area. Special Exceptions SE-4651 and SE-4402 were approved for the properties located to the east and south of the property. Both of these properties are being actively mined under valid Maryland Department of Environment Mining Permits, as referenced in Appendix A.

The proposed mining operation is located in the Mattawoman Creek watershed, in the Mattawoman Creek drainage basin of the Potomac River, in the 2013 Approved Subregion 5 Master Plan, and in Planning Area 85A. The subject property is located in the Rural Tier as approved in the General Plan and is further identified as parcels 19, 21, 124 on Tax Map 153.

This special exception application area has no structures or dwellings and is almost entirely wooded. The existing land use for the entire application area is forest. There are two unnamed stream systems, stream buffers, 100-year floodplains, wetlands, and wetland buffers located onsite. There are no adverse impacts from off-site locations that would affect the future development of this property.

The property is located in sewer and water service categories S-6 and W-6, which means it is not planned to receive public water or sewer service. According to information obtained from the Maryland Department of Natural Resources (MD DNR) Natural Heritage Program, there are no rare, threatened, or endangered species found to occur on or in the vicinity of this property. As part of the MD DNR review, the possibility of forest interior dwelling bird species (FIDS) habitat was identified. Accokeek Road is a master plan designated collector and is a scenic and historic road. There will be one employee entrance road off Accokeek Road, which will not be used for material transportation or public access.

There are no designated historic sites on this property or on adjacent properties. An archaeological survey was conducted on-site between December 2023 and January 2024. A Phase I archaeological survey was submitted and dated May 2024 with the findings and recommendations.

3.2 Community Description

The subject property is located in the 2013 *Approved Subregion 5 Master Plan*, in Planning Area 85A, and is in the Environmental Strategies Area 3 as approved in the 2014 *Plan Prince George's* 2035 *Approved General Plan* (Plan 2035). The vision for the Rural Tier is protection of large amounts of land for woodland, wildlife habitat, recreation and agricultural pursuits, and preservation of the rural character and vistas that now exist. Plan 2035 identifies the site within the general future land use and growth policy area of rural and agricultural areas.

The character is to remain rural as it exists today, and the preservation of viewsheds and vistas is important. The 2013 *Approved Subregion 5 Master Plan* designates the subject property for rural land uses. The property is zoned Agricultural Rural (AR), and the mining of sand and gravel is a permitted use in this zone by special exception. The surrounding properties are also zoned AR.

The Rural and Agricultural Zones are intended to:

- Support and provide lands for agricultural, forestry, agribusiness, agritourism, agricultural support, and related uses important to the County's economy and the character of the County's Rural and Agricultural Zones;
- Preserve and protect the County's important natural resources, environmentally sensitive lands, and ecological heritage lands while providing for their use and enjoyment;
- Encourage agribusiness and tourism uses such as, but not limited to, equestrian
 centers and boarding facilities, boutique or unique agribusiness, farmers' markets, retreat
 and training facilities, day camps, recreational campgrounds, heritage and rural tourism
 destinations, and bed and breakfast inns, and ensure they are compatible with the rural and
 agricultural character established in the zones;
- Ensure open spaces are designed to maximize preservation and protection of important
 natural and agricultural resources to facilitate stormwater management and protect water
 quality, maximize residents' exposure to open space, maintain the visual character of scenic
 roads, promote rehabilitation of degraded habitats, and protect ongoing agricultural
 activities and prime agricultural lands; and
- Provide and maintain infrastructure at levels of service that are compatible with the character and needs of the Rural and Agricultural Zones.

4.0 ALTERNATIVES ANALYSIS

The subject special exception application proposes mining approximately 230.45 acres of the 351.29-acre property for sand and gravel extraction in four phases, as summarized in Table 4.1. The mining operation will disturb 230.45 acres of woodlands. The proposed mining will require the installation and maintenance of 12 sediment control devices to minimize stream sedimentation and soil erosion.

Table 4.1 Phasing Plan

Phase	Total Acreage of Phase (Acres)	Land Use for Area to be Mined	Average Overburden Depth	Average Sand and Gravel Depth	Assumed Duration (Years)
1	29.28	Woods	9 ft. 6 in.	13 ft. 6 in.	1.5
2	123.77	Woods	13 ft. 7in.	12 ft. 1 in.	3.0
3	40.07	Woods	10 ft. 7 in.	6 ft 9 in.	1
4	37.33	Woods	7 ft.	12 ft. 6 in.	2
TOTAL	230.45				8

Current development within the mining site's drainage area cis limited. Approximately 99 percent of the land is wooded, and the remaining 1 percent is unforested land. Within the special exception application boundary, the entire site is wooded except for 1.51 acres of open floodplain area.

Mining within the 351.29-acre site is only proposed for the approximately 230.45 acres due to the required preservation of streams, streams buffers, and wetlands. For the purposes of predicting the mining activity on the environment, the following assumptions were made:

- 1) Mining of the 351.29-acre site is proposed to be accomplished in four phases over eight years (Tale 4.1). A detailed mining schedule was provided in the application.
- 2) Reclamation of a mined-out area would commence prior to the start of the next phase of mining.

Three impact stages are associated with each mining phase. These are:

- <u>Initial stage</u> defined as a point when the vegetation at the mining site is stripped, and mining activity is scheduled to commence.
- Operating stage defined as a point in time when mining is occurring, and the sand and gravel are being trucked out of the site.
- <u>Final stage</u> defined as a point in time when the entire mining activity for a particular phase is completed and stabilized.

During the Initial Stage of Phase 1, 29.28 acres would be stripped and prepared for mining. At the operating stage, this area (29.28 acres) would have sand and gravel excavated and placed on a proposed portable conveyor belt system for processing at an adjacent property. At the final stage, all mining activity is ceased, stabilized, and re-vegetation of all disturbed areas is performed. The

previously mined 29.28 acres will then be transferred into reforestation as outlined in Tree Conservation Plan (TCP2-033-2024). This sequence of mining, stabilization, and revegetation/reforestation has been assumed throughout the entire operation until the full 230.45 acres have been mined. The Tree Conservation Plan indicates that 58 percent of the mining site will be reforested. The Woodland Conservation Ordinance requirements will ultimately be met on-site with on-site preservation and reforestation.

The stormwater management plan submitted with the subject application indicates that most of the sediment traps and/or sediment basins will primarily outfall or drain into the mining pit. Overflow stormwater, if necessary, will drain into the adjacent unnamed stream systems. This would suggest that the mining operation will have minimal impact on the smaller tributaries, although their drainage areas will decrease as water is directed toward the active pit area. The impact of the proposed mining activity on each of the environmental elements during various stages has been predicted using the assumptions in Table 4.2.

Table 4.2 Predicted Impact of Mining on Environmental Elements

ACREAGE AND LAND COVER ASSUMPTIONS				
	Initial Stage (acres)	Operating Stage (acres)	Final Stage (acres)	
Forest Land	349.78	227.44	263.00	
Unforested Floodplain	1.51	1.51	1.51	
Bare Ground / Mining Area	N/A	122.34	86.78 (17 Open Space)	
Total	351.29	351.29	351.29	

4.1 The Proposed Mining Activity

Prince George's County is one of the few counties in the state with extensive sand and gravel deposits. The extraction of such minerals has historically been an important industry in the County. The industry helps to support the local economy by generating jobs as well as providing a much-needed resource for development in the Washington region.

Under Article 66B, a comprehensive plan must incorporate land use policies and recommendations to balance mineral resource extraction with other land uses and prevent the preemption of mineral resources extraction by other uses. The subject property has been analyzed and was found to contain sufficient sand and gravel resources to warrant mining.

Most development activities within the County are also subject to the planning regulations, policies and strategies included in the General Plan and the Countywide Green Infrastructure Plan, as well as the Woodland and Wildlife Habitat Conservation Ordinance. These regulations, policies, and strategies are in place to ensure that all development within the County, including sand and gravel mining, is performed in an environmentally sound manner.

The mining activity is proposed to include the following typical sequence for each phase in the order listed: removal of vegetation; removal of topsoil and placement in berms or stockpiles; excavation of materials using excavators; movement of materials on-site using bulldozers and dump trucks; and hauling of materials to on-site proposed elevated conveyor to transport material to adjacent off-site Gaslight I wash plant.

Portions of approximately 17 lots and/or parcels are located within a quarter mile of the subject site, as shown in Table 4.3. All of these 17 properties were identified from the MDE well permit database.

The wells within a quarter mile of the site are below the proposed depth of mining. The bored wells are located on Springfield Road, Accokeek Road, and McKendree Road are at depths from 29 to 52 feet below the surface. The MDE records further indicate that the majority of residential wells in the area are at depths in deeper aquifers. These deeper aquifers occur at depths over 370 feet.

The hydrogeologic conditions that underlie the site vicinity include a confining layer that acts as a hydraulic barrier between the surficial water table aquifer in the Upland deposits and the deeper aquifers that supply ground water to wells in the area.

The effects of the proposed mining on the identified properties are analyzed in this EIR.

Table 4.3 Properties Within a Quarter Mile of the Subject Site with Wells

I	Properties Located Within A Quarter Mile Of The Subject Site With Wells				
Permit #	Road Name/	Well Total	Well Drill	Vell Drill Well Uses	
	Address	Depth	Method		
PG730175	Springfield Rd	50	Bored	Drinking Water	
PG730176	Springfield Rd	52	Bored	Drinking Water	
PG730396	RT	No Data	Bored	Drinking Water	
	373(Accokeek				
	Rd)				
PG730550	Springfield Rd	No Data	Rotary	Drinking Water	
PG730829	Gardner Rd	371	Rotary	Drinking Water	
PG810760	RT	421	Rotary	Drinking Water	
	373(Accokeek				
	Rd)				
PG811161	4804 Danville	430	Rotary	Drinking Water	
	Rd				
PG881066	Accokeek Rd	445	Rotary	Drinking Water	
PG882574	Accokeek Rd	355	Rotary	Drinking Water	
PG882077	Accokeek Rd	33	Bored	Test Well	
PG882078	Accokeek Rd	29	Bored	Test well	
PG920296	4510 Accokeek	446	Rotary	Drinking Water	
	Rd				
PG941235	4404 Accokeek	420	Rotary	Drinking Water	
	Rd				
PG942195	4701 Accokeek	437	Rotary	Drinking Water	
	Rd				
PG940960	McKendree			Test Well	
PG942741	4500 Suitland	35	Bored	Test Well	
	Rd				

PG950336	5601 Accokeek	520	Rotary	Industrial/Commercial/Dewatering
	Rd			

The depth of mining is not expected to alter ground water levels because mining is not proposed to occur to a depth below the existing water table. No dewatering is proposed. Only mineral extraction is planned, and no washing or processing of raw material is proposed on-site.

The proposed mining will require the approval of an erosion and sediment control plan containing devices (sediment traps and or basins) to control soil erosion and limit stream sedimentation. The only minor impact on the regulated environmental features (stream and stream buffer) is for an elevated conveyor system to transport the material to the adjacent Gaslight I site.

Specific resource impacts of the proposed mining activity have been evaluated in Section 5.0 of this EIR.

At this time, no mining sequence has been provided on the submitted Combination Concept & Environmental Site Development, Grading, Erosion and Sediment Control Plan. All that has been provided has been various plans showing the proposed final grading elevations and the four mining phases' locations.

The statement of justification provided with the application states that the proposed mining operations are allowed from 7 a.m. to 7 p.m. Monday through Friday and 7 a.m. to 4 p.m. on Saturdays, excluding federal holidays. There are no operations on Sundays. The evaluations contained herein are based on these proposed hours of operation. The applicant states that these are the hours upon which their submitted studies were based.

4.2 No-project Alternative

Sand and gravel are marketable resources that are only available in areas within specific geologic formations. These formations are clustered in the northern and southern portions of the County, as seen in Figure 1.3. Alternatives to the proposed mining application are limited due to the location of the resource.

4.3 Alternative Development Potential

The subject property is located in the Environmental Strategy Area 3 as designated in Plan 2035 and is zoned A-R; a zone that requires a five-acre minimum lot size. The vicinity of the subject property contains many active, abandoned, or reclaimed mining sites. The remaining area contains undeveloped wooded parcels, scattered home sites, and a few residential subdivisions. This area was formerly known as the Rural Tier, and the master plan recommends low-density residential use in the area. The use of the conservation subdivision technique is required in the Rural Tier.

4.3.1 Land

Development activity in this part of the County is limited because it is located in the former Rural Tier. A few single-family detached residential developments have been built in the last decade; however, this area generally retains a rural character. If the subject property were developed with single-family residences according to the zoning, disturbance to the soil would not significantly alter the landform of the area.

The topography of the site would be subject to natural wind and water erosion; however, impacts would be negligible. In addition, streams, wetlands, and floodplains would be protected under Sections 24-129 and 24-130 of the Subdivision Regulations in the same manner in which the resources will be protected under Section 27-317(a)(7) of the Zoning Ordinance. Both regulations require that the streams, wetlands, floodplains, and their associated buffers be preserved to the fullest extent possible.

4.3.2 Water

With regard to stormwater runoff and drainage, the potential development of the property with single-family detached dwellings on large lots would not significantly alter the existing runoff patterns. Drainage patterns are generally maintained when stormwater management systems are designed, resulting in ground and surface water recharge in the vicinity of the rainfall, especially on developments that will maintain or establish large, forested areas. A slight decrease in the site's capacity to absorb precipitation and recharge the area's ground water would result from the construction of roads, driveways, and houses but should not significantly affect the overall infiltration capacity of the site.

4.3.3 Air

The development of the subject property with large lot, single-family detached housing would not cause any significant changes in climate or air quality.

4.3.4 Biota

If developed with a residential use, the construction of single-family detached houses on large lots would have a minimally negative impact on the flora and resident and transient fauna because large lots allow for portions of the existing woodlands to remain undisturbed and also allow for the reestablishment of woodlands. The effect of development on the regulated streams and wetlands onsite would be minimal.

With regard to the Woodland and Wildlife Habitat Conservation Ordinance requirements, the woodland conservation requirement for this site, based on the amount of clearing proposed, is 226.86 acres of net tract woodlands and 0.58 acre of wooded floodplain. The tree conservation plan submitted with the mining application proposes a combination of preservation and reforestation. It is recommended that, at a minimum, the woodland conservation threshold be met on-site. Large lot subdivisions would be required to meet the woodland conservation in a similar manner; therefore, the amount of woodland provided would be essentially the same as a result of either the subject application or a future subdivision.

4.3.5 Human-Related

Traffic: The rate of traffic growth is unrelated to the subject application and would be assumed to occur regardless of the status of the subject application.

Noise: The existing noise environment at the proposed mining site can be characterized as typical of a low-population rural area. The future environment without the mining activity would remain fairly constant with no adverse noise impacts on the immediate vicinity.

Scenic Views: The development of the subject property with single-family detached residences on large lots is not likely to affect the scenic value of the site or the surrounding area. Low-density residential development is consistent with the current land use in the area. Accokeek Road is a master plan designated arterial and is a historic road that requires evaluation of the visual aesthetics as part of the residential subdivision review. Existing woodlands should be used as a historic buffer. This residential development will require an entrance road off Accokeek Road. The clearing for this entrance road shall be minimized to limit impact on the scenic view off Accokeek Road.

5.0 FUTURE CONDITIONS WITHOUT MINING

In this section, profiles of the property's existing physical, environmental, and natural habitat elements are presented, followed by an evaluation of the predicted impacts of the sand and gravel mining operation.

5.1 Land

Development activity in this part of the County has been limited. A few single-family detached residential developments have been built in the last decade; however, overall, this area has seen little activity. In a large lot subdivision such as the one that could be built on the subject property, less than 50 percent of the soil on the site would be disturbed during development. The development would save more woodlands to preserve woodland on each lot. Such disturbance would not significantly alter the landform of the area. The topography of the site would be subject to natural wind and water erosion; however, repercussions would be negligible.

The subject property is located in a part of the County zoned for low-density residential uses. This application area contains 351.29 acres, which is zoned AR, requiring a minimum lot size of two acres. Theoretically, this site could be subdivided to produce 175 lots in the AR zone.

The site is located in the 2013 *Approved Subregion 5 Master Plan* in the Rural Tier (Environmental Strategy Area 3). This is the second largest land use tier behind the Developing Tier (Environmental Strategy Area 2) in Subregion 5, encompassing more than 150 square miles. According to the Subregion 5 Master Plan, "The vision for the Rural Tier is protection of large amounts of land for woodland, wildlife habitat, recreation, and agricultural pursuits, the preservation of rural character and the conservation of significant scenic vistas. Land use, environmental, transportation, and public facilities policies recommended for the Rural Tier are intended to balance pressure for residential development and landowners' equity with the desire to maintain rural character and sustainable natural environments."

There are two active sand and gravel mines (Gaslight I and II) and two wash plants (Gaslight I and Renard Lakes Holding) within a five-mile radius of the subject property.

5.1.1 Geology

The site is located in the Atlantic Coastal Plain Physiographic Province, and consequently, it is underlain by sedimentary layers of clays, silts, sands, and gravel. Only the Upland Deposits Formation (formerly the Brandywine Formation) is exposed on the site (Figure 1.2). This geological unit, consisting of gravel, sand, and loam, with gravel occurring in abundance at the deposit base, is the prime formation to be mined.

The Upland Deposits Formation has a sub-formation identified as Silt loam soils Hardpan in Upland deposits. The Upland deposits consist largely of poorly sorted, medium-to-coarse sand interbedded with pebbly sand and medium-to-coarse gravel. The sand is predominantly quartz, and the pebbles quartzite, sandstone, and chert. The basal beds of the deposit include scattered boulders ranging to several feet in diameter. Bedding is chiefly lenticular and cross-bedded to massive.

Where least dissected, the uppermost portion of the deposit consists of as much as 15 feet of compact yellowish to reddish-brown pebbly loam. The total thickness of the unit reaches a maximum of 40 feet.

The Upland Deposits Formation was formed as part of an ancient delta of the Potomac River. The age of the deposits is from the late Miocene and Pliocene times. The Silt loam soils Hardpan in Upland deposits contain thick hardpan within the Upland deposits. The hardpan is described as 3 to 4 feet thick and approximately 2 feet below the ground surface.

The current application proposes an average depth of mining of approximately 25 feet below the surface. The overburden (topsoil and soil that is not high in sand and gravel content) is proposed to be removed and stockpiled for use in the reclamation of the site.

Evaluation of Predicted Impacts

The mining of the site will temporarily alter the surface contours and drainage patterns and will result in the removal of a majority of the sand and gravel formation on the subject property. The proposed reclamation plan will return the site to near its current conditions; however, the geology of the area will be altered by the removal of the sand and gravel layer.

5.1.2 Soils

Existing Conditions

The soil types found on the property and the hydrologic soil groups are shown below as accessed September 2024. (Source: Natural Resources Conservation Service, United States Department of Agriculture, www.websoilsurvey.nrcs.usda.gov):

Table 5.1 Existing Soils

SOIL TYPES ON THE SUBJECT PROPERTY					
Symbol	Soil Type	Soil Group	K-Factor		
ApA	Aquasco silt loam, 0-2 percent slopes	D	0.49		
АрВ	Aquasco silt loam, 2-5 percent slopes	D	0.49		
ВаА	Beltsville silt loam, 0-2 percent slopes	С	0.37		
ВаВ	Beltsville silt loam, 2-5 percent slopes	С	0.37		
ВаС	Beltsville silt loam, 5-10 percent slopes	С	0.43		
CwE	Croom-Marr complex 15-25 percent slopes	С	0.15		
DoC	Downer-Hamonton complex, 5-10 percent slopes	A	0.10		
FaaA	Fallsington sandy loams, 0-2 percent slopes	C/D	N/A		
GwD	Grosstown-Woodstown-Beltsville complex	С	0.37		
LQA	Lenni and Quindocqua soils, 0-2 percent slopes	C/D	0.43		
Px	Potobac-Issue complex	B/D	0.28		
WdaB	Woodstown Sandy loam, 2-5 percent slopes	С	0.24		

WoC Woodstown silt loam, 5-	10 percent slopes C	0.15
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The distribution of the soils in the area is shown in Table 5.1 and a brief description of the identified soils follows.

Aquasco silt loam (ApA and ApB) soils are poorly drained and occur on nearly level to gently sloping uplands with a moderate depth to a very dense, hard brittle fragipan through which water moves slowly. This fragipan supports a perched water table that is at or very near the surface during wet periods, as evident on the northern portion of the project area. The two isolated nontidal wetlands occur where the topography is essentially flat. Aquasco soils were probably deposited by wind over strongly weathered sandy and gravelly materials.

Beltsville silt loam (BaA, BaB, and BaC) series consists of moderately well-drained soils with a thick, densely packed, yet not cemented fragipan. These Beltsville soils developed in silty to sandy materials that were likely deposited by wind over old alluvium. They occur mainly on the level of gently sloping uplands. The clayey fraction of parent material produces a slow permeability, impeded drainage, and perched water table.

Croom-Marr complex (CwE) consists of well-drained gravelly soils that have a red to yellow-brown subsoil and are deep and very gravelly, very firm with materials; this soil type has developed on old deposits of sandy and clayey gravels. The Croom-Marr soils are sloping to moderate steep.

Downer-Hamonton complex (DoC) series consists of deep, well-drained soils that develop in sandy material containing some clay but little silt. This soil type is found on nearly level strongly sloping uplands of the Coastal Plan.

Fallsington sandy loam (FaaA) consists of poorly drained soils that have gray subsoil through which water moves readily. These soils are on the Coastal Plain, where they developed on old sandy deposits containing moderate amounts of silt and clay. This soil type occurs on uplands, chiefly in nearly level areas. Some areas are gently to moderately sloping.

Grosstown-Woodstown-Beltsville complex (GwD) series consists of moderately well-drained soils with a thick, densely packed, yet not cemented fragipan. The Grosstown-Woodstown-Beltsville complex soils developed in silty to sandy materials that were likely deposited by wind over old alluvium. This soil type occurs mainly on level to gently sloping uplands. The clayey fraction of parent material produces a slow permeability, impeded drainage, and perched water table.

Lenni and Quindocqua soils (LQA) are poorly drained soils and occur on nearly level surfaces. This soil type develops in acid clay and silty clay deposits. Water flows very slowly through the gray, highly clayey subsoil.

Potobac-Issue complex (Px) occurs on the floodplains of the unnamed tributaries to Mattawoman Creek. This soil type is deep and associated with high water table, flooding, and poor drainage. Materials that make up the Potobac-Issue complex soils were washed from uplands and deposited along streams and drainage ways. The water table is at or near the surface in winter and early spring. This soil is subject to scouring and/or deposition.

Woodstown Sandy Loam (WdaB) consists of deep, moderately well-drained soils through which water moves readily to somewhat slowly. This soil type develops in a thin mantle of wind-deposited silt and very fine sand underlain by older deposits of sand and, in place, gravelly material. The Woodstown soil type is found on nearly level to moderately sloping uplands in the Coastal

Plain.

Soils may also be classified by Hydrologic Soil Groups (USDA, Soil Conservation Service, 1975). Group A soils have high infiltration rates even when thoroughly wetted. Group B soils have moderate infiltration rates and moderate runoff potential. Group C soils have low infiltration due to either a shallow hardpan or fine-textured soils, which are not rapidly permeable. Group D soils have very low rates of water transmission and very high runoff potential. Soils of the Hydrologic Group C represent about 38.5 percent, Group D soils represent about 38.8 percent, a combined Group C/D soils represent about 15 percent, a combined Group B/D soils represent about 2.68 percent, and Group A soils represent about 5.1 percent of the site.

The K-factor is a measure of erodibility. When the K-factor is greater than 0.35 soils are considered to be highly erodible. Disturbance of highly erodible soils on slopes of 15 percent or greater requires the installation of better-than-average erosion and sediment control devices. Because the site is relatively flat, standard best management practices for sediment control should be adequate.

During mining operations, it is typical for the topsoil to be stripped and stockpiled for future use. There appears to be a thin layer of topsoil on this site; however, it does contain valuable organic matter that should be retained.

Evaluation of Predicted Impacts

Within the limits of disturbance, the top layer of soil is proposed to be stripped and stockpiled. Because the areas proposed to be disturbed are relatively flat, standard best management practices for sediment control should be sufficient to meet the state requirements. After mining is complete, the contours will be restored as noted on the reclamation plan, and overburden will be redistributed across the site. Because of the disturbance to the soils and the removal of the sand and gravel, the soil properties may change in ways that are not entirely predictable.

Sand and gravel mining impacts the future development potential of the site because the Prince George's County Health Department does not permit the installation of septic fields on land that has been mined and reclaimed. The site is currently located within water and sewer category 6, which is categorized as Individual Systems. Development of the site is not currently being proposed. The manner in which the site is reclaimed will be an important aspect of any future development review to ensure that the soil compaction methods used can support future development. It is possible that if future development of the property is proposed that the reclaimed areas would need to be excavated and properly filled to support building foundations.

5.2 Water

5.2.1 Drainage, Runoff and Floodplain

Existing Conditions

The study area is traversed by several unnamed tributaries to Mattawoman Creek. These on-site stream systems are mostly wooded except with the southern stream system, which has unforested floodplain areas. The main stem of Mattawoman Creek is approximately 7,535 linear feet (following stream channels) from the subject mining site.

Mattawoman Creek drains in a westerly direction from this site into the Potomac River at a location approximately 28 miles downstream of Washington, DC. The stream system is nearly 26 miles long, covering about a 78.9 square mile drainage area in Prince George's and Charles Counties in Maryland, and is 7.7 miles wide at its widest point.

The creek slopes approximately 10.9 feet per mile in the upper half of the watershed. In the lower half of the watershed, part of which is subject to tidal influences (up to Mason Springs), the average slope is approximately 8.4 feet per mile. Mattawoman Creek is highly brachiated, resulting in many small creeks and feed streams along its entire length. Current development within the sub-drainage areas containing the mining site is limited.

Evaluation of Predicted Impacts

Runoff from the mining site would change primarily due to the loss of vegetative covering during the mining operations, reducing the natural interception, transpiration, and infiltration of such ground cover. Stripping the topsoil replaces the soil layer and ground litter with high organic content, allowing for great initial abstraction at the beginning of a storm event. However, once the site is reclaimed, there will be little to no change in the runoff. All mining activities are outside the 100-year floodplain, so no impact is anticipated.

Extensive calculations were prepared, and modeling conducted to determine the flood elevations and support the conclusions in this section. This information can be obtained from the Prince George's County Department of Permitting, Inspections, and Permitting (DPIE) citing the floodplain study, FPS 200142, approved 2001.

5.2.2 Surface Water

Existing Conditions

Water quality standards are set by federal and state laws to protect water bodies based on their designated use. A "use," as defined by these laws, refers to an intended human and/or aquatic life objective, use, or goal for a waterway. Standards are set to ensure that waterways are usable for drinking water, swimming, fishing, industrial, and agricultural uses. These standards are set for waterways based on the designated use and include quantifiable criteria that are used to measure potential threats to the use of the water body. Where specific numeric criteria are not available, narrative criteria apply.

The on-site tributaries of Mattawoman Creek are classified as Use I waterways (COMAR 26.08.02.08) for water contact recreation; fishing; the growth and propagation of fish (other than trout); other aquatic life and wildlife; agricultural water supply; and industrial water supply. Use I waters have minimum water quality criteria, including bacteriological, dissolved oxygen, temperature, pH, turbidity, color, and toxic substances.

An anti-degradation policy (COMAR 26.08.02.04-1) has also been established to ensure that water quality continues to support the designated uses. There are three tiers of protection. Tier I specifies the minimum standard that must be met to support a balance of indigenous populations and to support contact recreation; Tier I is often referred to as "fishable – swimmable." A Tier II designation protects water that is better than the minimum specified for a designated use. Tier III is for the protection of outstanding resource waters. No Tier III designations are located in Maryland.

The anti-degradation policy states that waters of the state shall be protected and maintained for existing uses and the basic uses of water contact recreation, fishing, protection of aquatic life and wildlife, and agricultural and industrial water supply for Use I waterways.

To accomplish the objective of maintaining existing water quality, new and existing point sources are required by the state to achieve the highest applicable statutory and regulatory effluent requirements, and nonpoint sources are required to implement all cost-effective and reasonable best management practices for nonpoint source control.

The on-site waters are classified as Tier I under the anti-degradation policy; however, the site is located within a Tier II watershed. The on-site waters comprise the headwaters of the North Branch of the Mattawoman, which is a designated Tier II waterway downstream of the subject site.

According to water quality monitoring conducted by Prince George's County and reported in the Countywide Green Infrastructure Plan (Approved June 14, 2005), the current water quality ratings for the Mattawoman Creek watershed are shown in Table 5.2. Of the 42 watersheds in Prince George's County, there are only four that have been rated "fair" for Benthic Index of Biological Integrity (IBI's) and seven that have been rated "fair" for habitat. There are no watersheds in the County that have been rated "good" using this rating system. The water quality data reported is based on actual water sampling.

Table 5.2 Water Quality Rating

Water Quality Ratings				
Watershed Benthic IBI Rating Habitat Ratin				
Mattawoman Creek	Poor	Fair		

The water quality ratings of "poor" may appear to conflict with the Tier II watershed designation; however, the tier designations are based on human-related uses and the water quality ratings measure the suitability for naturally occurring biota. While these two measures are not completely mutually exclusive, they measure different facets of the health of stream systems.

Evaluation of Predicted Impacts

The primary pollutant of surface water from sand and gravel mining is sediment. During the operating stage of the mining operation, when sand and gravel are removed from the site, existing drainage patterns will be changed from sheet flow to shallow concentrated flow. At this point sediment will be introduced into the flow, transported, and eventually deposited downstream if not controlled. Because the sediment yields are so much larger for bare ground, sediment control devices must be installed to reduce the amount of sediment-laden runoff transported to the streams from the mined areas. There are several sediment control basins and traps proposed for the mining operation. These devices are standard best management practices. Each control device does not remove or trap all sediment but has efficiency associated with it based on the available capacity of the device and the drainage area.

Increased sediment loads may directly affect the turbidity and color of the receiving stream if not controlled. The remaining water quality criteria, including bacteriological, dissolved oxygen, temperature, pH, and toxic substances, may be indirectly affected by an increase in sedimentation. Required sediment and erosion control measures are designed to minimize the sediment loads in effluent leaving mining sites. The water quality criteria are not likely to be significantly affected because of the required sediment and erosion control measures as well as the temporary nature of mining operations. Sedimentation should return to pre-mining levels once reclamation has been completed and vegetation has been re-established.

Because this site is located within a Tier II watershed, additional information and/or mitigation measures may be required by the state to meet the anti-degradation policy requirements of the Water Quality Certification as part of the National Pollutant Discharge Elimination System (NPDES) permit.

All grading, erosion, and sediment control plans are reviewed by the Prince George's County Soil Conservation District for conformance with the current Maryland Standards and Specifications for Soil Erosion and Sediment Control as well as the current Prince George's Soil Conservation District Soil Erosion and Sediment Control, Pond Safety Manual. Sediment and erosion control devices must function for both existing and proposed drainage areas and elevations. All outfalls must be designed to ensure non-erosive conditions.

A Water Quality Certification (COMAR 26.08.02.10) is required for any activity that may result in any discharge to navigable waters unless the applicant provides a certification from the state that the activity does not violate state water quality standards or limitations. Discharges permitted by the state under the NPDES are certified by MDE.

All proposed impacts to waterways require a permit to ensure that anti-degradation policy and water quality standards are met. This project will be reviewed by the MDE, and they will issue all necessary permits. Enforcement is also the responsibility of MDE.

5.2.3 Groundwater

Existing Conditions

Both unconfined (ground water) and confined (artesian) aquifers are found within the County.

Unconfined aquifers are the major source of base flow to surface streams, as water in the water table generally moves toward and discharges into surface water bodies. The water level in unconfined aquifers normally fluctuates seasonally, with the highest and lowest levels experienced in early spring and early fall, respectively. Unconfined aquifers are also very susceptible to the effects of drought.

Wells in unconfined aquifers are usually shallow and are constructed by digging. Wells of this type are sometimes used for private residential water supplies and may also be used for agriculture.

Confined aquifers provide a reliable water source. Though both aquifer types are recharged through precipitation, confined aquifers also exchange water through leaks in the confining layers, and those located in the Coastal Plain generally do not discharge to surface water bodies. There are several aquifers located within the county. In general order of nearness to the surface, the aquifers are the Calvert and Nanjemoy; Aquia; Brightseat, Severn and Matawan; Magothy; Patapsco; and Patuxent.

Evaluation of Predicted Impacts

A Hydrologic Evaluation report prepared by Geo-Technology Associates Inc. (GTA) dated October 4, 2024, has been reviewed. The reports include a domestic well search area plan and an evaluation of the potential for ground water disturbance, including a conceptual cross section that shows the ground water depth in relation to the proposed depth of mining.

The report states that based on test pits, the depth to ground water ranges from approximately 204 to 211 feet above mean sea level, or about 23 feet below the surface in the Upland area of the site.

The water table slopes northwest on the western portion of the site and east on the eastern portion of the site as a subdued reflection of topography. The cross section provided in the report illustrates a 'worst case' scenario because it is close to the wetlands and stream, and the test pit data showed that the product thickness was greatest in this area. The cross section indicates that the depth of mining ranges in elevation from approximately 198 feet to about 226 feet. The interception, pumping, and storage of ground water, or dewatering, is not proposed; therefore, the water table

should not be negatively impacted.

The MDE well database contained 24 records for domestic wells within about a mile of the site. Seventeen of the wells ranged in total depth from 350 to 440 feet below the existing ground surface (bgs); these wells appear to tap the relatively deep confined aquifer system. This MDE well database further indicates that 13 of the residential wells in the area are at depths in deeper aquifers. These deeper aquifers occur at depths over 370 feet. The hydrogeologic conditions that underlie the site vicinity include a confining layer that acts as a hydraulic barrier between the surficial water table aquifer in the Upland deposits and the deeper aquifers that supply ground water to wells in the area. Records of seven wells indicated depths ranging from about 21 to 65 feet bgs; these wells appear to be relatively distant from the site, e.g., 500 feet or more from the property boundary, based on information provided in the database.

The report summarizes that the mining operation will not have a negative impact on the quantity and quality of ground water flowing into the adjacent wetlands and residential wells because no dewatering of the pit basins is proposed at the site. Although no impacts to surrounding wells are anticipated, the applicant may need to provide new wells for any property owner within a quarter mile whose well is negatively affected by the mining operation. A condition of special exception approval is recommended to address this situation should it arise.

The Hydrologic Impact Evaluation report submitted with the subject application and dated October 4, 2024, conducted 21 soil test pits to establish associated elevation of ground water throughout the application area. These test pit evaluations were excavated and investigated between September 4 through 11, 2024. Subsurface ground water depths vary depending on the time of year with the highest elevation usually in the late winter to early springtime months of the year. The time of year when the ground water is the highest is called "wet weather season." At the time of this September testing, ground water was encountered at depths of 7.5 to 17 feet bgs. The estimated ground water elevation for this site is from elevations 204 to 211 feet bgs.

Confined aquifers provide a reliable water source. Though both aquifer types are recharged through precipitation, confined aquifers also exchange water through leaks in the confining layers, and those located in the Coastal Plain generally do not discharge to surface water bodies. There are four major confined aquifers beneath the study area. In order of nearness to the surface, they are the Aquia, Magothy, Patapsco, and Patuxent aquifers. The Aquia was deposited during the Paleocene epoch of the Tertiary period, 58 to 63 million years ago. The Magothy, Patapsco, and Patuxent formations were deposited during the Cretaceous period, 63 to 135 million years ago (MD Dept. of Natural Resources, 1982; Mack, 1966). The Patuxent Formation, because of its depth, is not relevant to this EIR. The top of the Patuxent Formation is greater than 800 feet below mean sea level.

The Aquia formation is composed of fine to coarse greenish-brown sand with layers of silt and clay, calcitic cemented sand, and fossil beds composed of shell debris. It ranges in thickness from 0 to 250 feet. The Aquia aquifer is confined above and below by relatively impermeable layers, including the Nanjemoy formation above and the Monmouth, Matawan, and Brightseat formations below, which separates it from the Magothy aquifer.

The recharge area of the Aquia aquifer extends northeasterly from the Potomac River Bluffs in western Charles County to the headwaters of the Sassafras River on the Eastern Shore. The quality of water in the Aquia aquifer is generally good and can be used for domestic purposes without treatment. Moderately acidic pH values can be found in the recharge area and are attributed to recharge by acidic rain. The range of pH values in this area is from 5.2 to 7.0. Under artesian conditions, however, the pH is usually within the range of 7.0 to 8.5. Water is usually found to be

soft in the recharged areas and moderately hard in the rest of the formation. The top of the Aquia Formation is at about zero elevation in the study area.

The Magothy formation is one of the most extensive water-bearing formations in the Coastal Plain of Maryland, underlying almost the entire Eastern Shore and large portions of Anne Arundel, Calvert, Charles, and Prince George's Counties. The Magothy aquifer consists of light gray loose sand and fine gravel containing inter-bedded lignitic, pyritic, and clay layers. The coarser sand and gravels are found near the bottom of the formation, with formation becoming more clayey toward the top. The thickness of the aquifer ranges from a few feet to over 100 feet. The recharge area extends from the Bowie area of Prince George's County, through Anne Arundel County, to Kent and Cecil Counties on the Eastern Shore. The top of the Magothy Formation is about 200 feet below sea level in the study area. The Patapsco Formation consists of mainly red and gray mottled silty clay and fine to medium, gray to yellow sand. The top of this formation is generally about 300 feet below mean sea level. According to the Potentiometric Surface Maps of Selected Confined Aquifers in Southern Maryland and Maryland's Eastern Shore, 2019 from the Maryland Geological Survey, 2020), all of the documented wells in the area collect water from the Magothy or Patapsco aquifers (Figure 5.1).

With regard to stormwater runoff and drainage, the development of the property with single-family detached dwellings on large lots would not significantly alter the existing runoff patterns. Drainage patterns are generally maintained when stormwater management systems are designed, resulting in ground and surface water recharge in the vicinity of the rainfall, especially on developments that will maintain large, forested areas. A slight decrease in the site's capacity to absorb precipitation and recharge the area's ground water would result from the construction of roads, driveways, and houses but should not significantly affect the overall infiltration capacity of the site. The houses constructed on the site would have to rely on wells and septic fields for water supply and waste disposal because public water and sewer services are not planned for the area.

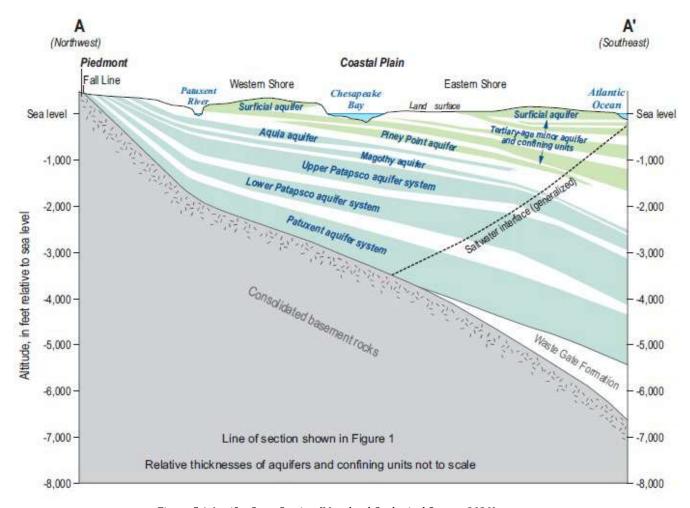


Figure 5.1 Aquifer Cross Section (Maryland Geological Survey, 2020)

5.3 Climatology and Air Quality

5.3.1 Climatology

Existing Conditions

The study area does not have a definable local airshed, and as such, its climate and air quality are typical of those within the entire county. Prince George's County has a humid, semi-continental climate with cold winters that are moderated by the nearby Chesapeake Bay and Atlantic Ocean and warm summers dominated by hot, moist air that is pumped north from the Gulf of Mexico. The site of the proposed mining operation is located in a rural setting in southern Prince George's County.

The Maryland State Climatologist Office (MDSCO) resides in the Department of Atmospheric and Oceanic Science at the University of Maryland; it was established in the 1980s. The closest weather station to the subject site is the Oxon Hill station. The Oxon Hill weather station is approximately 10 miles to the south in a similar physiographic setting, which provides data that should approximate weather conditions at the site. Data collected at the Oxon Hill station has been summarized for the period from 2000 to 2020. The mean monthly temperature during this period was 57 degrees Fahrenheit.

The warmest part of the year occurs in late July when temperatures in the upper 90 to low 100 degrees Fahrenheit have been recorded. The coldest period occurs from the end of January to early February when daily minimum temperatures average in the low 20 degrees Fahrenheit. The mean annual precipitation at 0xon Hill is 52.66 inches. Precipitation is distributed fairly evenly with a low of 2.68 inches in January, and a high of 5.61 inches in July. Heavy precipitation during the colder half of the year is generally the result of low-pressure systems moving north or northeastwardly along the coast. In summer, thunderstorms account for the majority of precipitation. The greatest precipitation amounts recorded have resulted from tropical storms or hurricanes. The highest average seasonal snowfall from 2020 to 2024 occurs from December to March and ranges from 9 inches at the highest and 3 inches at the lowest. Wind data is not available from the Oxon Hill weather station; however, the wind direction is predominately from a westerly direction.

Evaluation of Predicted Impacts

The proposed mining of sand and gravel from the subject property is not expected to have any impact on the climatology of the immediate area or of the surrounding area. Climatology information is also used in the calculation of air quality because natural rainfall assists in reducing the particulate impacts from mining.

5.3.2 Air Quality

The United States Environmental Protection Agency (EPA), under the authority of the Clean Air Act of 1990 and subsequent amendments, established the National Ambient Air Quality Standards (NAAQS). This regulation is applied to outdoor air conditions throughout the country.

The NAAQS contains six major air pollutants called "criteria pollutants": particulates, sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, and lead. These pollutants are called "criteria pollutants" by the EPA and are known to affect human health, harm the environment, and damage property. Examples of effects on human health include eye irritation, headaches, and aggravation of respiratory difficulties. Effects on plants and crops include abnormal growth patterns, leaf discoloration or spotting, and death. Property and materials damages include property devaluation because of odors, deterioration of materials and structures, and discoloration of painted surfaces. The aesthetic effects include reductions in visibility, discoloration of air, and the general nuisance aspects of odors and dust. The ambient air quality standards for each of these pollutants are shown in Table 5.3.

An area is considered in attainment if the ambient air quality is better than the NAAQS and is considered in nonattainment if the ambient air quality is worse than NAAQS. Criteria pollutants are regulated based on primary standards for health-based effects and secondary standards for the prevention of environmental and property damage. Geographic areas that remain below the primary standard are called attainment areas; areas that exceed the primary standard are called nonattainment areas. The proposed sand and gravel study area is located in Prince George's County, which is included in the Washington Metropolitan region. The region is considered to be in an attainment status for all criteria pollutants except for ground-level ozone and particulate matter less than 2.5 microns ($PM_{2.5}$), for which the region is in a nonattainment status. The following is a more detailed discussion of each major pollutant.

ATIONAL AMBIENT AIR	QUALITY STANDARDS		
		Primary	Secondary
	Annual Arithmetic Mean, ug/m ³	80	-
Sulfur Dioxide	24-hour Average ¹ , ug/m ³	365	-
	3-hour Average ¹ , ug/m ³	-	1,300
Particulate Matter (PM-10)	24-hour Average³, ug/m³	150	150
Particulate Matter	Annual Arithmetic Mean ⁴ , ug/m ³	15	15
(PM-2.5)	24-hour Average ⁵ , ug/m ³	15 35 0.15	35
Lead	Rolling 3-month average ² , ug/m ³	0.15	0.15
Lead	Quarterly Average ug/m ³	1.5	1.5
	8-hour Average ¹ , mg/m ³	10	N/A
Carbon Monoxide	1-hour Average ¹ , mg/m ³	35	N/A
Nitrogen Dioxide	Annual Arithmetic Mean, ug/m ³	100	100
Ozone (O3)	8-hour Average ⁶ , ppm	0.075	0.074
Ozone (O ₃)	8-hour Average ⁷ , ppm	0.08	0.08
Ozone (O ₃)	1-hour Average ⁸ , ppm	0.12	0.12

^a - not to be exceeded more than once per year

- 1- Not to be exceeded more than once per year
- 2- Final rule signed October 15, 2008
- 3- Not to be exceeded more than once per year on average over 3 years
- 4- To attain this standard, the 3-year average of the weighted annual mean PM2.5concentrations from single or multiple community-oriented monitors must not exceed 15.0 ug/m3
- 5- To attain this standard, the 3-year average of the 98th percentile of 24-hour concentrations at each population-oriented monitor within an area must not exceed 35 ug/m3
- 6- To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.075 ppm
- 7- (a) To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed0.08 ppm(b) The 1997 standard and the implementation rules for that standard will remain in place for implementation purposes as EPA undertakes rulemaking to address the transition from the 2008ozone standard to the 2015 ozone standard
- 8- (a) The standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is≤1(b) EPA revoked the 1-hour ozone standard in all areas except the 8-hourozone non-attainment Early Action Compact (EAC) Areas

b - not to be exceeded more than one day per year (averaged over 3 years)

Sulfur Dioxide: Sulfur Dioxide (SO_2) is a heavy, pungent, colorless gas formed primarily by the combustion of coal, oil, and other sulfur-bearing compounds. Major sources of sulfur dioxide in the region include power plants and residential and commercial heating facilities. High concentrations of sulfur dioxide can cause constriction of airways and increase respiratory difficulties. The National Capital Area is currently in attainment for SO_2 . No violations of the NAAQS have been reported since 1977.

Particulates: Particulates consist of fine pieces of dust and dirt, so small that they tend to stay suspended in the air. This pollutant results from the burning of fuels, particularly coal, in power plants, homes, and other stationary sources. Dust generated by construction and mining activities also contributes to particulate levels. It should be noted that the PM-2.5 standards are included for evaluation purposes only as they are not standards that are currently enforced by the EPA.

Lead: Ambient concentrations of lead are predominantly caused by emissions from gasoline-powered mobile sources due to the lead content in gasoline. The region is currently in an attainment zone of the lead standard, and lead concentrations have declined steadily as unleaded gasoline replaces leaded gasoline.

Carbon Monoxide: Carbon monoxide (CO) is a colorless, odorless gas generated by the incomplete combustion of fuel. In the Washington region, over 95 percent of total carbon monoxide emissions come from automobiles. When inhaled in high concentrations, CO may be fatal to humans, and even small amounts can be deleterious to health, causing drowsiness and dulling of senses. Cold temperatures and low wind speeds are conducive to high CO concentrations. Therefore, the highest levels of CO occur in the fall and winter. Carbon monoxide problems tend to be localized at highly congested intersections and along major community roads. CO disperses rapidly in the atmosphere, resulting in much lower concentrations a short distance from the emission sources. The National Capital Area currently meets the standard.

Nitrogen Dioxide: Nitrogen dioxide (NO_2) is formed when fuels are burned at high temperatures with air containing nitrogen. Power plants and automobiles are the two principal sources of this gas. Nitrogen oxides are a major contributor to the photochemical reactions that take place to form ozone. Exposure to high concentrations of nitrogen dioxide may aggravate the symptoms of people with chronic bronchitis and emphysema. The National Capital Area is currently in attainment for nitrogen dioxide and standards have been met across the region since 1976.

Ozone: Ozone (O₃) is a colorless, odorless gas formed in the atmosphere through a complex chemical reaction triggered by the action of sunlight on hydrocarbons and nitrogen dioxide. In the Washington region, this photochemical smog is generated primarily by emission from mobile sources, such as automobiles. Other sources include power plants, service stations, and consumer solvent use. At elevated levels, ozone can cause chest discomfort, headaches, and eye irritations. Individuals with chronic respiratory problems are particularly susceptible to ozone.

The National Capital area is currently in nonattainment for ozone. The arrival of a large stagnant air mass often causes high ozone readings across the entire metropolitan region. The highest readings, however, are usually observed in the north/northeast portion of the region due to normal summer wind patterns. On average, from 2013 to 2024, the Washington Metropolitan area has exceeded ozone standards by nine days every summer.

Existing Conditions - Ambient Air Quality

The application package for the subject special exception included an air quality report prepared by Jenkins Environmental Inc. dated October 12, 2023, and a supplemental report dated March 13, 2024. The air report, in conjunction with local monitoring station data, has been used for the following analysis. It is important to know the ambient air quality at the site and in the vicinity in order to measure the impact of the proposed use. Air quality in the area of the subject property is mainly impacted by farming operations and other sand and gravel operations.

Particulate matter (PM) is one of the main air emissions associated with sand and gravel mining operations. PM is comprised of small particles of solid and liquid material that vary in size. Particles less than 2.5 micrometers in diameter are called "fine particles" and come from combustion of fuels and industrial processes.

Particles ranging in size from 2.5 to 10 micrometers in diameter are called "coarse particles" and come from crushing or grinding operations, as well as dust from paved and unpaved roads. Coarse particles are generated during the mining process as well as from dust generated by truck traffic on both paved and unpaved roads. PM is also generated during the vegetation-clearing process.

Federal and state guidelines recommend the use of monitoring data from stations that are operated by governmental agencies to determine ambient air quality. The data from local stations in the region are used to represent the air quality near the site. Whenever data is not available at stations that are closest to the site, it is standard practice in air quality analysis to use data from other stations that are located in an area with similar land use patterns as the site. This procedure has been used over the past several years for air permit applications with the Maryland Department of the Environment (MDE), the U.S. Environmental Protection Agency (EPA), and numerous special exception applications for sand and gravel mining operations in Prince George's County.

Data from local monitoring stations were used to represent the ambient, or background, concentrations for the criteria pollutants in the vicinity of the subject site (Table 5.3). It should be noted that if more than one monitor was present for a given pollutant, the maximum of all monitored values was used to represent the background monitoring values in the air report prepared by ERM and submitted with the subject application. Data was taken from the Prince George's County Equestrian Center in Prince George's County for the surface weather data.

It is important to note that to measure the impact of the proposed use, sampling of the ambient air quality at the site and in the vicinity is necessary. Air quality in the area of the subject property is mainly impacted by surrounding agricultural operations, commuter traffic, and other industrial (mining) sites.

PM is of concern as it is generated during surface mining operations, primarily during the vegetation-clearing process and during mined material transportation. No off-site truck transport of mined materials is proposed with this location only the use of an elevated conveyor system to move the material to the adjacent Gaslight I wash plant facility. The actual mining operation does not generate a substantial amount of PM as the materials are course and tend to have a high moisture content.

Figure 5.2 contains the submitted study's ambient air quality levels that are assumed to represent the air quality at the subject property. These figures are considered the best available for this analysis.

		Monitoring		
Pollutant	Year	Station Data	Units	Standard
				,
				1-hour average ¹ (Maximum
l <u>.</u> [2020	0.122	ppm	value)
Ozone ⁵				1-hour average ¹ (Maximum
l <u>l</u>	2021	0.125	ppm	∨alue)
				1-hour average ¹ (Maximum
	2022	0.110	ppm	∨alue)
				8-hour average (4th highest
	2020	0.095	ppm	daily max)
- 5	2024	0.000		8-hour average (4th highest
Ozone ⁵	2021	0.088	ppm	daily max) 8-hour average (4th highest
	2023	0.079	nnm	o-nour average (4th highest daily max)
 				dally max)
	3-year Average ² 2020	0.087	ug/m³	Percentile Value)
	2020		ug/m³	Percentile Value)
PM _{2.5} ⁵	2021		ug/m³	Percentile Value)
	3-year Average ³		ug/m³	r ercentile value)
	2020		ug/m³	WTD Annual Mean
_	2021		ug/m³	WTD Annual Mean
PM _{2.5} ⁵	2022		ug/m³	WTD Annual Mean
	3-year A∨erage⁴		ug/m³	
	8-hour Average		ug/m ³	
Carbon Monoxide (CO) ⁶	1-hour Average	5	ug/m ³	
	Annual Arithmetic Mean,		ug/m ³	
Sulfur Dioxide (SO ₂) ⁶	24-hour Average	29	ug/m ³	
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	3-hour Average	87	ug/m³	
Particulate Matter (PM ₁₀) ⁷	Annual Arithmetic Mean		ug/m³	
Nitrogen Dioxide (NO ₂) ⁸	Annual Arithmetic Mean	21	ug/m³	

Note:

The monitoring station data provided by the Maryland Department of the Environment is contained in Appendix B

- 1 (a) The standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is ≤ 1
- (b) EPA revoked the 1-hour ozone standard in all areas except the 8-hour ozone non-attainment Early Action Compact (EAC) Areas
- ² (a) To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.08 ppm
 - (b) The 1997 standard and the implementation rules for that standard will remain in place for implementation purposes as EPA undertakes rulemaking to address the transition from the 2008 ozone standard to the 2015 ozone standard
- ³ To attain this standard, the 3-year average of the 98th percentile of 24-hour concentrations at each population-oriented monitor within an area must not exceed 35 ug/m³
- To attain this standard, the 3-year average of the weighted annual mean PM_{2.5} concentrations from single or multiple community-oriented monitors must not exceed 15.0 ug/m³
- $^{\rm 5}$ Prince George's Equestrian Center Air Monitoring Station
- ⁶ Beltsville Air Monitoring Station
- ⁷ Glen Burnie Air Monitoring Station

Figure 5.2 Air Quality Monitoring Data (Maryland Department of the Environment, March, 2024)

Evaluation of Predicted Impacts on Air Quality

To measure the impacts on air quality, the ambient air quality measurements presented in the previous section need to be added to the predicted levels of pollutants that will result from the proposed mining activity. The concern with regard to the subject application is particulate matter (PM-10and PM-2.5). While carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead are included as pollutants in the ambient air quality section, the emissions of these pollutants from this proposed sand and gravel operation (from internal combustion engines on mobile equipment) are predicted to be far below the National Ambient Air Quality Standards (NAAQS) and as such would not change the air quality of the site above the baseline monitoring values. The EPA already has regulations that address the reduction of these pollutants from mobile sources to be used by the proposed operation.

PM is of concern as it is generated during surface mining operations, primarily during the vegetation-clearing process and during mined material transportation. No off-site truck transport of mined materials is proposed at this mining location. This Gaslight III mining location proposes to use an on-site elevated conveyor system to move the material to the adjacent Gaslight I wash plant facility. The transportation of mining material from Gaslight I is under SE-4651 and SE-4402.

Particulate Matter Emissions

The dust particles measured as fine particulates (PM-10 and PM-2.5) are the primary pollutants of concern. PM-10 is an inhalable particulate matter that is invisible to the human eye (Table 5.4). PM-2.5 is also an inhalable particulate matter but is much more of a concern from the health-perspective of children, the elderly, and people who suffer from respiratory illnesses (Table 5.5).

Particulate matter (PM10) levels are expected to increase in the vicinity of the site due to the following activities associated with the proposed sand and gravel operation:

- Mining Activities
- Material Transfer to Storage Piles
- Material Loading to Conveyor
- Transport of Material via Conveyor
- Paved and Unpaved Roads
- Wind Erosion from Storage Piles

Surface Mining Activities

Specific PM emission factors do not exist for sand and gravel surface mining. The best and most conservative estimate for the characterization of these emissions would be to assume that they are similar to truck loading/unloading. This application will not truck materials off-site and will use a conveyor system. The following is the PM emission factor for surface mining activities:

Source	PM-10 Emissions (ton/yr)	PM-25 Emissions (lb/day)
Surface Mining – Sand and Gravel	0.0000160	No emission factor
		available

Material Transfer to Storage Piles

The material from the sand and gravel mining is transferred to storage piles on the site prior to being loaded into the conveyor system. The material transferred by mobile equipment will be controlled by wet suppression. The following is the PM emission factor for material loading:

Source	PM-10 Emissions (ton/yr)	PM-25 Emissions (lb/day)
Material Transfer to Storage Piles	0.000046	0.0000130

Material Loading to Conveyor

Material removed during the mining activities will be loaded into the conveyor for transport to the Gaslight I material processing facility. The following is the PM emission factor for material loading:

Source	PM-10 Emissions (ton/yr)	PM-25 Emissions (lb/day)
Material Loading to Conveyor	0.0000160	No emission factor
		available

Material Loading to Conveyor

Material will be transported via a conveyor system to the processing facility located at Gaslight I. The material transported will be moist, and minimal emissions would be expected from the conveyor transport. The following is the PM emission factor for material transport:

Source	PM-10 Emissions (ton/yr)	PM-25 Emissions (lb/day)
Conveying of Material to Gaslight	0.00033	No emission factor
1 (covered)		available

Fugitive Emissions from Paved and Unpaved Roads

Unlike normal mining operations, the mined material will not be shipped off-site via haul trucks, thus minimizing traffic at the site. The mobile equipment travel was estimated based on the traffic study and experience with other similar mining projects. Emissions will be generated from the movement of a loader utilized load material onto the conveyor, haul trucks, grader, two (2) excavators and water truck moving within the site. Emissions from personal vehicles onto the site will mainly be on paved roads and will be insignificant compared to heavy equipment.

Wind Erosion of Storage Piles

Particulate emissions may be generated by wind erosion of open storage piles.

A summary of the emissions from the proposed sand and gravel operation is contained in Table 5.5 and 5.6.

Table 5.4 PM-10 Emissions

Process	PM-10 Emissions	PM-10 Emissions	PM-10 Emissions
	(ton/yr)	(lb/day)	(lb/hr)
Surface Mining	5.20E-03	4.00E-02	4.00E-03
Material Transfer to Storage Piles	1.50E-02	1.15E-01	1.15E-02
Material Loading to Conveyor	5.20E-03	8.25E-01	4.00E-03

Process	PM-10 Emissions	PM-10 Emissions	PM-10 Emissions
	(ton/yr)	(lb/day)	(lb/hr)
Conveyor	1.07E-01	8.25E-01	8.25E-02
Paved Roads	1.79E+00	4.59E+01	4.59E+00
Unpaved Roads	1.58E+00	4.04E+01	4.04E+00
Storage Pile Wind Erosion	3.46E-01	7.91E-01	7.91E-02
Total	3.85E+00	8.81E+01	8.81E+00

PM-10 Emissions (ug/m 3)= 0.033

Table 5.5 PM-2.5 Emissions

Process	PM-10 Emissions (ton/yr)	PM-10 Emissions (lb/day)	PM-10 Emissions (lb/hr)
Surface Mining*	5.20E-03	4.00E-02	4.00E-03
Material Transfer to Storage Piles	4.23E-03	5.45E-02	5.45E-03
Material Loading to Conveyor*	5.20E-03	4.00E-02	4.00E-03
Conveyor*	1.07E-01	8.25E-01	8.25E-02
Paved Roads	2.68E+01	6.88E+00	6.88E-01
Unpaved Roads	1.58E+01	4.04E+00	4.04E-01
Storage Pile Wind Erosion*	3.46E-01	7.91E-02	7.91E-03
Total	3.85E+00	8.81E+01	8.81E+00

^{*} Note: No PM-2.5data was available for these sources; therefore, as a conservative estimate, the PM-10 emissions were used.

PM-10 Emissions (ug/m 3) = 0.0044

Evaluation of Predicted Impacts on Ambient Particulate Matter (PM) Levels

The Maryland Department of the Environment (MDE) regulates PM generated by traffic on the haul roads under its nuisance regulation. Code of Maryland Regulation (COMAR 26.11.06.08) requires that "an installation may not be operated or maintained in such a manner that a nuisance or air pollution is created."

COMAR 26.11.06.03(D) specifically addresses PM from materials handling and mining operations. This section states that "a person may not cause or permit any material to be handled, transported, or stored, or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent PM from becoming airborne."

The reasonable precautions shall include, but not be limited to, the following when appropriate as determined by the control officer:

- Use of water or chemicals for control of dust in the construction operations, the grading of roads, or the clearing of land.
- Application of asphalt, oil, water, or suitable chemicals on dirt roads, material stockpiles, and other surfaces, which can create airborne dusts.
- Installation and use of hoods, fans, and dust collectors to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting of buildings or other similar operations.
- Covering at all times when in motion, open-bodied vehicles transporting materials are likely to create air pollution. Alternate means may be employed to achieve the same results, as would covering the vehicles.
- The paving of roadways and their maintenance is in clean condition.
- The prompt removal from paved streets of earth or other material that has been transported there by truck or earth moving equipment or erosion by water.

The site will maintain compliance with COMAR 26.11.06.03(D) by:

- Maintaining interior roads with a water truck or other approved dust control methods
- Implement a 15-mph speed limit to reduce dust generation from travel on the unpaved portion of the proposed interior roads.

Proposing a landscaping plan that includes buffering and screening measures around the perimeter of the site will further reduceoff-site impacts of particulate matter from the proposed mining operations.

The applicant (Holcim-MAR, Inc.) proposes to only extract the materials for the subject site. The scope of work is to remove the material and mechanically transport the material using a conveyor system to move the material to the adjacent Gas Light wet-processing facility. The proposed conveyor system will be located throughout the facility during the different phases of the extraction process. No on-site processing or trucking of the material over the adjacent Accokeek Road is proposed.

5.4 Biota

5.4.1 Woodlands

The Prince George's County 2010 Woodland Conservation and Tree Preservation Ordinance requires the preparation and approval of a natural resource inventory (NRI) plan and Tree Conservation Plan as an integral part of the review process for all land development and land clearing activities, including sand and gravel mining operations. Under normal circumstances, a Type I Tree Conservation Plan is prepared during the review of a special exception, and a Type 2 Tree Conservation Plan is prepared and approved in conjunction with an application for a grading permit; however, with a special exception for a mining operation, there is no grading permit and thus a Type 2 Tree Conservation Plan is prepared and approved with the special exception.

The subject property totals 351.29 acres and is located on Accokeek Road just west of the Danville Road and Accokeek Road intersection. The proposed mining will result in the clearing and grading of approximately 230.45 acres, including 227.44 acres of woodland.

As part of the subject application, a NRI plan was prepared in June 2022 and approved in August 2022.

The report was prepared by a qualified professional certified by the State of Maryland Forest Service to prepare forest stand delineations and tree conservation plans.

An NRI is prepared by first identifying forest areas found on the property and developing a sampling scheme based on the environmental, physical, and historical land use characteristics of the site. The forest areas are then sampled using a statistical sampling method which collects information about tree species, tree sizes, number of trees per acre, basal area, canopy closure, herbaceous cover, downed woody material, invasive plant cover, number of shrubs per acre, and understory species composition. Once the data have been collected, the information is summarized, and a narrative description is prepared for each forest stand. A forest stand is an area of trees of similar species composition, age, size, and stocking levels. For the purposes of this application, the entire area of the special exception application has been included in the forest stand delineation (FSD).

This 351.29-acre property is dominated by woodlands, which account for 349.78 acres or 99 percent of land area. The 284.45 acres of woodlands on the net tract account for 81 percent of the woodlands, while the 65.33 acres of woodland in the 100-year floodplain account for 18 percent of the woodlands. There are areas within the 100-year floodplain that are devoid of forest cover that have been subject to beaver activity during the last 15 years.

The FSD for this property identifies three (A, B, and C) distinct forest stands which are similar in species composition, age, and stocking levels to those found throughout much of south-central and southwestern Prince George's County.

The Prince George's County Woodland and Wildlife Habitat Conservation Ordinance requires the approval of an NRI and the approval of a Type 2 tree conservation plan as an integral part of the review process for all land development activities, including special exceptions required for sand and gravel mining operations. An approved NRI (NRI-133-2022) and unapproved TCP2 (TCP2-033-2024) were submitted with the subject application.

Existing Conditions

The required forest stand delineation (FSD) report was included with NRI-133-2022, approved on August 18, 2022. The FSD report dated July 2022, prepared by Atwell (formerly Ben Dyer Associates Inc.), indicates the presence of three forest stands totaling 349.78 acres and seventeen specimen trees.

Overall, the dominant species found in Stands A, B, and C is Red Maple, and there are portions of each of the stand which include a high percentage of hard and softwoods such as Virginia pine, loblolly pine, sweetgum, southern red oak, and white oak. The understory species vary from stand to stand. There is REF located within each of the three stand areas. These stands are proposed to be impacted during every phase of the mining operation.

Stand A - Early-Intermediate Pine Dominated Forest

Stand A comprises 120.06 acres of forest dominated by Virginia pine and loblolly pine, red maple, and other hardwoods have a presence in the canopy as well. American holly and highbush blueberry are the common species in the understory and the herbaceous cover comprises deerberry and Common greenbrier. The average number of trees is 334 stems per acre, with five species of trees per plot greater than 6 inches DBH. Three specimen trees were identified within Stand A. The Forest Analysis and Priorities score calculated for the stand is 43 and is classified as a High Priority for both preservation and restoration, due to having a high condition score and abutting an intermittent stream.

Stand B - Intermediate Aged Mixed Bottomland Hardwood Forest

Stand B comprises 53.42 acres of mixed bottomland hardwood species, with red maple being the dominant tree, and sweet gum is common as well. American holly and highbush blueberry are the common species in the understory and bladder sedge, New York fern and clubmoss comprise the herbaceous layer. The average number of trees is 296 stems per acre, with 5.6 species of trees per plot greater than 6 inches DBH. Four specimen trees were identified within the boundaries of Stand B. The Forest Analysis and Priorities score calculated for the stand is 47 and is classified as a High Priority for both preservation and restoration, due to the stand encompassing most of the streams and wetlands on the site and having a high Forest Analysis and Priorities score.

Stand C - Early-Intermediate Aged Mixed Hardwood Forest

Stand C comprises 176.30 acres of hardwood forest dominated by white oak, red maple, and southern red oak. American holly and highbush blueberry are the common species in the understory. Deerberry and partridge berry were found in the herbaceous cover layer. The average number of trees per acre is 268, with 5.6 tree species per plot attaining diameters greater than 6 inches. Ten specimen trees were encountered at the time of the site visit on Stand C. The Forest Analysis and Priorities score calculated for the stand is 47 and is classified as a High Priority for both preservation and restoration, due to having a high stand analysis score and directly abutting an intermittent unnamed tributary of Mattawoman Creek.

The FSD, as submitted, satisfies the requirements in accordance with the Prince George's County Woodland Conservation and Tree Preservation Policy Document and the Woodland Conservation Technical Manual. The field data sheets, the summary of the field data, the forest stand delineation map, and a narrative were included with the FSD. The complete FSD is available for review in the files of the M-NCPPC Environmental Planning Section.

The NRI (NRI-133-2022), as submitted, satisfies the requirements for an NRI in accordance with the Prince George's County Environmental Technical Manual. The FSD report, field data sheets, the summary of the field data, the NRI map, and a narrative were included with the NRI.

Evaluation of the Predicted Impacts

The property is subject to the requirements of the Prince George's County Woodland Conservation and Tree Preservation Ordinance. A Type 2 Tree Conservation Plan (TCP2-033-2024) was prepared and submitted. Because the mining will be conducted in four (4) phases, the plans were prepared to ensure that the property remains in conformance with the ordinance during each phase.

This property is subject to the provisions of the Prince George's County Woodland and Wildlife Habitat Conservation Ordinance because the gross tract area is greater than 40,000 square feet in size, and there are more than 10,000 square feet of existing woodlands. A Type 2 Tree Conservation Plan (TCP2-033-2024) was reviewed and was found to generally meet the requirements.

The woodland conservation requirement for a property is determined by a combination of the woodland conservation threshold (WCT), a percentage requirement based on the zoning, and a replacement requirement of $\frac{1}{4}$:1, 1:1, and/or 2:1 based on the amount and location of woodland clearing proposed. All clearing above the WCT is subject to the $\frac{1}{4}$:1 replacement requirement, clearing below the WCT is subject to the 2:1 replacement requirement, and clearing within the 100-year floodplain is subject to the 1:1 replacement requirement.

The woodland conservation requirement for a property is determined by a combination of the WCT, a base percentage requirement based on the zoning, and a floating replacement requirement of 1/4:1, 1:1, and/or 2:1 based on the amount and location of woodland clearing proposed.

All clearing above the WCT is subject to the $\frac{1}{4}$:1 replacement requirement, clearing below the WCT is subject to the 2:1 replacement requirement, and clearing within the 100-year floodplain is subject to the 1:1 replacement requirement.

This property includes 351.29 acres of land in the A-R zone with 66.84 acres of 100-year floodplain for a Net Tract Area of 284.45 acres. There are 284.45 acres of woodlands and 65.33 acres of woodland within the 100-year floodplain. The WCT for the A-R zone is 50 percent of 142,23 acres with no afforestation requirement area of existing woodlands.

The submitted TCP2 does not break down the woodland clearing in mining phases but just as one whole clearing number. A total of 226.86 acres of net tract woodland clearing and 0.58 acres of 100-year floodplain clearing is proposed for this mining application. The woodland conservation requirement is 263.00 acres. Upon completion of all mining activities and part of the mining reclamation, a total of 57.59 acres of woodland will have been preserved and 205.41 acres planted on the net tract. Gaslight III will meet their woodland requirement all on-site. For the purpose of woodland conservation, an area is considered to be woodland after two complete growing seasons and 75 percent survival of the planted trees.

Conditions of approval of the special exception have been included in the staff report to address the technical requirements of a TCP2 prior to certification. It is recommended that entire woodland conservation requirement shall be met on-site to the extent practicable and, at a minimum, the site's WCT of 142.23 acres shall be met on-site.

With the exception of impacts necessary for proposed elevated conveyor system, the TCP2 shows the preservation of woodlands within the regulated areas of the site (streams and wetlands and their associated buffers and 100-year floodplain). Four specimen trees are proposed to be removed.

5.4.2 Streams and Wetlands

Existing Conditions

A wetlands delineation prepared by Atwell (formerly Ben Dyer Associated, Inc.) was performed in August, September, and November 2015 and revalidated by Atwell in June 2022. As part of the Joint Federal/State Application for the Alteration of Any Floodplain, Waterway, Tidal or Nontidal Wetland in Maryland process, the U.S. Army Corps of Engineers (COE) and the Maryland Department (MDE) has verified the delineation for the applicant. A wetland delineation is represented on NRI-133-2022, and the wetland report is available in the case file at the Planning Department's Environmental Planning Section.

Section 24-4303(c) of the Subdivision Regulations requires that properties located outside a Transit Oriented Center shall have a minimum buffer of 100 feet measured from each bank of a stream. Section 24-2300 for wetland buffer requires a minimum 25-foot buffer measured from the edge of a wetland. Direct impacts to streams and wetlands are subject to provisions of the Federal Clean Water Act and will require a Section 404 Permit reviewed by the COE and a Section 401 Water Quality Certification from the MDE. Impacts to the 25-foot wetland buffer are subject to review by the MDE.

A wetland and stream delineation and the associated report dated June 2022, prepared by Atwell LLC. (Formerly Ben Dyer Associates Inc.), was provided as part of the NRI approved on August 18, 2022. The delineation information provided is sufficient for county-level review; however, it should be noted that the COE and/or MDE are the regulating agencies for permitting and enforcement of impacts to waters of the U.S. and waters of the state, including wetlands.

Direct impacts to streams and wetlands are subject to provisions of the Federal Clean Water Act and will require a Section 404 Permit reviewed by the COE and a Section 401 Water Quality Certification from the MDE. Impacts to the 25-foot-wide wetland buffers are subject to review by the MDE. Review of impacts to regulated environmental features is through the Zoning Ordinance.

The Zoning Ordinance requires a 100-foot stream buffer measured from each bank of a stream and a 25-foot buffer measured from the edge of a wetland. These regulated environmental features plus 100-year floodplain, stream, wetlands, and adjacent steep slopes comprise the PMA. Impacts proposed to the PMA as part of a zoning application require a letter of justification per Section 24-4303(d)(5). The letter of justification is required to state how the proposed design ensures the preservation and/or restoration of the regulated environmental features to the fullest extent possible.

Evaluation of Predicted Impacts

The applicant has applied for a Joint Federal/State Application for the Alteration of Any Floodplain, Waterway, Tidal, or Nontidal Wetland in Maryland with the MDE and COE for the wetland, and wetland buffer impacts. This application (24-NT-0188/202461254) was approved on October 9, 2024, and expires October 9, 2029. The approval allows for a temporary access road and an aggregate material conveyor for a sand and gravel mine. The project will temporarily impact 555 square feet (185 linear feet) of waters of the United States and 31,172 square feet of the 100-year floodplain.

Impact 1: shows the impacts of a proposed conveyor crossing to transport the material from Phases 2, 3, and 4 across a regulated stream. The project will temporarily impact 555 square feet (185 linear feet) of waters of the United States and 31,172 square feet of the 100-year floodplain. This type of stream section could be recreated and/or mimicked during reclamation of the site after mining and reforestation.

The proposed conveyor system is needed for this mining site to transport the on-site sand and gravel to the adjacent Gaslight I wash plant facility. This mining site will not use the adjacent Accokeek Road to transport the material to the adjacent wash plant site. No other wetland, wetland buffer, stream, and 100-year floodplain features are within the proposed mining application.

The letter of justification submitted describes one minor impact to the PMA for the installation of a product conveyor system to move the product to Gaslight 1 facility.

5.4.3 Flora and Fauna

Existing Conditions

A complete inventory of the species of plants, insects, amphibians, reptiles, mammals, and birds on the site was not conducted. The site is over 95 percent forested, with small open canopy areas within the on-site 100-year floodplain areas of the property. There are wetlands, streams, associated buffers, and 100-year floodplain within the mining area. Based on the existing site conditions, the approved FSD report, the known use patterns of the area, and adjacent uses, a complete species inventory was not necessary.

Evaluation of Predicted Impacts

Within the limits of disturbance, animals that cannot flee will likely perish, and the existing plants will be destroyed. The structural change of the Upland habitat may affect some types of species.

Stream and wetland plants and animal species should experience no significant impact because these habitats are beyond the limit of disturbance. Areas of preservation and reforestation, as proposed in the tree conservation plan, will result in the preservation of 57.59 acres of woodlands and reforestation of 205.41 acres of woodlands. When the forest matures, it will once again support a diversity of species that can migrate from adjacent and connected forest habitats.

5.4.4 Rare, Threatened, and Endangered Species

Existing Conditions

The Maryland Endangered Species Act requires review of all state permits by the Maryland Department of Natural Resources (MDNR). The MDNR must issue a finding of no significant impact before a permit may be released by any state agency. A state permit for the mining activity will be required before mining can commence.

According to a letter dated August 22, 2016, from the MDNR, Natural Heritage Program, there are no records of rare, threatened, or endangered species found to occur on or in the vicinity of this property. The letter identifies forest interior dwelling bird species (FIDS) habitat on-site, and there are edge habitats (300 feet within woodland boundary) and FIDS habitat (woodlands beyond the 300-foot edge area).

Evaluation of Predicted Impacts

Because no threatened/endangered species have been identified on this site or on adjacent properties, no impacts are anticipated.

5.5 Human-Related

5.5.1 Transportation

The analysis for this section of the report was conducted by staff associated with the Transportation Planning Section and is presented in conjunction with a traffic study submitted with the application. The submitted traffic study, dated September 2024, was limited to a statement that the special exception application would have a minimal impact, if any, on public roadways within the area.

The findings and recommendations summarized below are based upon a review of these and other relevant materials and analyses conducted by the staff. The study has been referred to by the Maryland State Highway Administration (SHA), Department of Public Works and Transportation, and the Department of Permitting, Inspections and Enforcement (DPIE). Neither agency has offered comments to date; any comments received will be addressed and added to the record by the transportation planning staff when received.

Existing Conditions

The subject property is currently unimproved and is located within Transportation Service Area (TSA) 3, as defined in the *Plan Prince George's* 2035 *Approved General Plan* (Plan 2035). As such, the subject property is evaluated according to TSA 3 with the following standards:

Links and Signalized Intersections: Level of Service (LOS) C, with signalized intersections operating at a critical lane volume (CLV) of 1,300 or better and links at a volume-to-capacity (V/C) ratio of 0.65 or less. Mitigation, per Section 24-124(a)(6) of the Subdivision Regulations, is permitted at signalized intersections within any TSA subject to meeting the geographical criteria in the TRG.

The traffic generated by the proposed use would impact the following roadway links in the transportation system:

MD 373 between McKendree Road and MD 5 MD 373 between the site access and McKendree Road

While the subject site is located within TSA 3, the roadway link along MD 373 between McKendree Road and MD 5 is located within TSA 2. The maximum allowable V/C for road links in TSA 2 is 0.845 and a CLV of 1,450 or better. The existing traffic conditions meet these standards (Table 5.6).

Access to the site is proposed via a driveway from MD 373 just west of Danville Road. MD 373 is a two-lane state-maintained highway traveling in an east-west direction. MD 373 has lane widths ranging from 11 feet to 12 feet and shoulders ranging from 0 feet to 2 feet. At no point is the pavement width along this link less than 24 feet. The majority of the link of MD 373 is posted at 40 miles per hour. Between McKendree Road and MD 5, MD 373 has a rural cross section with a well-maintained centerline and pavement edge markings; passing is permitted along portions of this section. MD 373 adjacent to the site is a master plan arterial roadway. The ultimate right-of-way has not been dedicated to date; however, all grading activity is located outside of the ultimate right-of-way.

A second access point is proposed connecting to an existing access haul road on the adjacent site. This access point is limited to internal haul roads and associated mining activity. The proposed access point is located to the southeast corner of the subject site, near the proposed location for the conveyor system for transporting raw material to the wet-processing facility. This access point was not included in the traffic study as there are no impacts to the adjacent roadway, and all trips associated with this access are internal to the site.

Table 5.6 Existing Traffic Conditions

EXISTING TRAFFIC CONDITIONS					
Roadway Link V/C Ratio Level of Service					
	(AM)	<u>& PM)</u>	(Pass	<u>& Fail)</u>	
MD 373 from the site access and McKendree Road	0.27	0.31	Pass	Pass	
MD 373 from McKendree Road to MD 5	0.24	0.33	Pass	Pass	
*Links are analyzed to determine a volume-to-capa given per the Guidelines.	city ratio, or	V/C, with the	appropria	te LOS	

Evaluation of Projected Impacts

A review of the SHA traffic database has revealed an annual growth rate in traffic along MD 373 between MD 5 of 1.0 percent. This rate of traffic growth is unrelated to the subject application and would be assumed to occur regardless of the status of the subject application.

Staff identified all approved developments within the immediate area of the link under study. While there is an approved preliminary plan of subdivision (PPS) for Estates at Pleasant Valley, the property has since been rezoned and is the subject of an approved Comprehensive Design Plan and Specific Design Plan for infrastructure only. There is no approved PPS, and therefore, the site would not meet the criteria for inclusion as background development. However, staff has included the approved dwelling units for the purposes of this analysis to provide a more comprehensive analysis of future impacts of the subject application. Those identified developments would directly affect the link under study and would include the following:

- Michael's Retreat: 155 single-family attached dwelling units
- Estates at Pleasant Valley: 323 single-family detached dwelling units

Collectively, the background developments could generate 351 (70 inbound, 281 outbound) AM peak hour trips and 415 (272 inbound, 143 outbound) PM peak hour trips. To determine the impact on the transportation network in the future, two years' worth of growth is applied to the traffic counts. The projected traffic from the background developments is added to the estimated future traffic, and the results are analyzed using the methodologies outlined in the TRG (Table 5.7). If the subject site were to be otherwise developed, the impacts of the development would have to be tested for transportation adequacy during a different process.

Table 5.7 Background Traffic Conditions

BACKGROUND TRAFFIC CONDITIONS					
Roadway Link <u>V/C Ratio</u> <u>Level of Service</u>					
	(AM)	<u>& PM)</u>	(Pass	<u>& Fail)</u>	
MD 373 from the site access and McKendree Road	0.27	0.33	Pass	Pass	
MD 373 from McKendree Road to MD 5	0.39	0.36	Pass	Pass	
*Links are analyzed to determine a volume-to-capacity ratio, or V/C, with the appropriate LOS					

There are six employees and managers expected on the site. Visitors to the site include water and fuel trucks (four and one per day, respectively) and any needed service vehicles (estimate one per day but on an as-needed basis). It is assumed that the visitors generate two trips in and two trips out during each peak hour, while employees would generate six trips in during the AM peak hour and six trips out during the PM peak hour.

The total projected traffic volumes were obtained by combining the site-generated trips with the projected future condition without the subject application, which includes reasonable growth in existing through traffic and traffic that would be generated by approved background development. The resulting projected future traffic conditions for the critical intersections show that traffic will continue to flow at acceptable levels (Table 5.8).

TOTAL TRAFFIC CONDITIONS					
<u>Roadway Link</u>	V/C Ratio (AM & PM)		<u>Level of Service</u> (Pass & Fail)		
MD 373 from the site access and McKendree Road	0.27	0.33	Pass	Pass	
MD 373 from McKendree Road to MD 5	0.39	0.36	Pass	Pass	
*Links are analyzed to determine a volume-to-capacity ratio, or V/C, with the appropriate LOS given per the Guidelines.					

Given that the mining of the subject site will not commence until mining has been completed in SE-4647, there are no trips to be added to represent total traffic; the trips associated with the use are already on the road and can be assumed to have been captured in the updated traffic counts. Therefore, background and total traffic would be identical. Staff performed an additional analysis that assumed all trips associated with the current proposal were new trips on the network. The results of this additional analysis found that there was no change in the projected volume-to-capacity (V/C) ratio reported in Table 5.9.

The results of the study indicate that the roadway links of MD 373 adjacent to the site operate acceptably now and in the future, regardless of the mining activity within the subject site.

The analyses of the proposed mining application were predicated on two significant operational assumptions. Those assumptions are as follows:

- All extracted materials will be transported on-site to an elevated conveyor system.
 The conveyor system would transport the materials to the adjacent wash plant
 currently operating under Special Exception SE-4790. Aside from the conveyor
 system, there is no haul route for this site.
- Traffic to and from the site will be limited to employees and visitors to the site.

The traffic impacts of the mining activity should be further mitigated by the following conditions:

- 1. All extracted materials will be transported off-site by means of a conveyor system to a neighboring wash plant.
- 2. Traffic to and from the site will be limited to employees and visitors to the site.

5.5.2 Noise

A noise study, "Environmental Noise Assessment -Sand and Gravel Extraction – Gaslight III Quary Site, Prince Georges County," was prepared by Michael A. Staiano (Staiano Engineering Inc.), dated March 4, 2024. The field work was performed during October 2023.

The noise analysis contained in this report was conducted by Staiano Engineering Inc. using available resources and equipment. It is purposefully simplistic in nature and should be viewed as an overview of the potential noise impacts of the proposed sand and gravel mining operation. It does not include the potential noise impacts of the associated wet-processing plant because that use is not part of the subject application.

Noise impacts are evaluated with respect to how the predicted noise levels compare with state

noise standards and regulations (COMAR 26.02.03). The state noise standards apply to noise receptors and are established based on land use categories (industrial, commercial, and residential). The Maryland State and Prince George's Co. noise source limits are defined in terms of the time-average equivalent sound level (LAeq). In daytime, the maximum sound level is 65 dBA. For predicting the annoyance-evoking potential of a noise exposure and assessing the compatibility of land uses with respect to noise, the nighttime-weighted, 24 hour average noise descriptor, daynight average sound level (Ldn), is commonly used. The recommendation for residential uses is≤65 dBA[Ldn] per widely accepted guidelines. It should be noted that the mining operation will have only daytime hours of operation and that the noise generated from mining operations is instantaneous noise, not the level day/ night (Ldn) standard used in Prince George's County with respect to traffic noise. Instantaneous noise levels are more restrictive, defined by COMAR, and used for the evaluation of noise emanating from mining sites. Traffic-generated noise is regulated using the level day/night average.

The noise environment in the project area will be affected by noise from two types of sources: point and nonpoint. Point source noise emanates from the various excavation equipment used on-site. Nonpoint source noise emanates from the flow of vehicular traffic along a roadway or haul road. The main source of vehicular-related noise in relation to mining operations comes from the dump trucks moving around on the site, entering the site empty, and full trucks hauling material away. This Gaslight III facility will only have vehicular-related noise in relation to mining operations that come from the dump trucks and excavating equipment moving around on the site since no off-site hauling of product is proposed.

Current ambient sound levels were measured near the proposed Gaslight III Quarry Site for sand and gravel mining in Prince George's County, Md. Future sound levels due to the operations were predicted at representative existing noise-sensitive receptor locations. The measurement and analysis procedures used in this study are consistent with accepted practice. Assumptions were chosen to result in conservative noise exposure predictions.

Nonpoint source (also called "line source") noise emanates from the flow of vehicular traffic along a roadway. Predicted noise levels from highway traffic are calculated through a series of adjustments to a reference sound level. The reference sound level is the total sum of the sound contributions of the various classes of vehicles using the highway. Adjustments are made to traffic volume, the perpendicular distances from the centerline of the roadway to the receiver, finite length roadways, and shielding, such as barriers, which reduce noise levels.

Existing Conditions

The existing noise environment within the vicinity of the proposed mining is typical of a low-density rural area. The property has frontage on Accokeek Road, just west of the Danville Road intersection. Accokeek Road is a master plan designated arterial, which does not generate sufficient traffic to be evaluated for noise purposes. There are residential buildings located along Accokeek Road in the vicinity of the site.

The existing sound levels in the area surrounding the proposed Gaslight III Quarry surface mining operation were quantified by means of an ambient noise survey conducted in October 2023. The field measurements were performed by Gannett Fleming, Inc., Fairfax, Virginia. The purpose of the ambient noise survey was to provide context for the proposed mining activity. While there is no reason to suspect the measured results are in any way atypical, unavoidably, they strictly apply only to the times of the actual survey. The ambient survey results do not affect the design goals for the site—which are based on absolute criteria.

The subject noise study collected noise measurements at two locations:

- Location A -This location is south of Accokeek Road at Neale Drive on the site of the Apostolic Faith Church of Jesus Christ the Lord.
- Location B This location is south of Accokeek Road between Gardner Road and Danville Road. The sample location was placed near the dwellings north of Accokeek Road, about 250 feet and 70 feet from the Accokeek Road centerline. Sample B most likely will represent the noise exposures to nearby dwellings north of Accokeek Road.

There were two types of noise measurements performed at these locations (A and B):

- Attended Short-Term Measurements Sound levels were acquired at Location A for nominally 20-minute intervals during daytime. The microphone position was set back approximately 186 feet from the Accokeek Road centerline.
- Unattended Long-Term Monitoring Unattended noise monitors recorded conditions continuously around-the-clock at both A and B locations.

The noise survey was conducted in 2023 from October 3–5. Mean overall sound levels are: Average sound level (LAeq) was 54 dBA; 10th-percentile sound level (L10) was 58 dBA; and the range of sound levels occurring 85 percent of the time (L90–L05) was 44–59 dBA. The most common noise sources were vehicle pass-bys.

Evaluation of the Predicted Future Anticipated Noise Impacts

Site mining noise in adjacent residential areas, due to expected future activities at the proposed sand and gravel extraction operation, will be primarily the result of mobile equipment activity.

Typical mining operations and sources are:

- **Removal of Overburden** (OBR) This Activity Will Use an Excavator.
- **Concurrent Excavation of Raw Sand and Gravel** (EXT) This Activity Will Use an Excavator and an Off-road Hauler to Transport Unprocessed Raw Material to a Conveyor Loading Hopper.
- **Reclamation** (RCL)—the regrading, final activity after mining has been completed in an area. This activity will use a track dozer and an off-road hauler.
- Backup Alarms Electronic backup alarms are probably the noise sources most often found objectionable in mobile equipment operations. Therefore, the minimization of backup alarm noise is strongly encouraged. However, backup alarms are required by Federal safety regulations that mandate audible warning devices for industrial or mining equipment moving in reverse. Backup alarms should not be disabled since accident risks will be increased and potential liability may be incurred in the event of an accident.

Several options exist for the abatement of noise exposures. The Society of Automotive Engineers governs the performance of electronic backup alarms. This group has identified five backup alarm types with emission levels over a 35-dBA range. If a machine's backup alarm is of the noisiest design type, it may possibly be replaced with one significantly quieter and still provide adequate warnings. However, the lowest sound wave backup alarm sufficient for "audibility" to meet safety requirements should be used. Alternatively, alarms that automatically adjust their volume based on ambient sound level are commercially available. In addition, discriminating backup alarm controllers that sound the alarm only when an obstacle is detected also are available and recommended.

Evaluation of the Predicted Mining Noise Impacts

The proposed Gaslight III sand and gravel extraction and the currently active adjacent Gaslight I processing plant are both located in the Rural Residential zone. Residential development of any of the adjacent properties is unlikely in the near future. The noise study determined that noise receptors, to collect noise exposures, would be placed in residential areas or possible noise impact areas.

The proposed mining noise exposures were evaluated at the following locations:

- Location 1 The closest existing noise-sensitive uses are along Accokeek Road. The nearest one is a small cluster of residences between Gardner and Danville Roads. This residential area is separated by Accokeek Road and the mine setbacks with perimeter berm. The extraction activities may approach as close as 220 feet to a dwelling.
- Location 2 The residential areas in the vicinity of Neale Drive
- Location 3 The site of Apostolic Faith Church of Jesus Christ the Lord, which is south of Accokeek Road and about 1600 ft from closest proposed mining.

Only Location 1 presents any real concern for noise impact. Location 2 and Location 3 were identified for impacts.

Sand and gravel are a sedimentary formation in which the raw sand and gravel deposit of variable thickness lies under a variable depth of unusable overburden. Equipment for overburden removal will sit at the bottom of the overburden layer. Sand and gravel excavation equipment will sit at the bottom of the sand and gravel deposit. Machinery operation below surface elevation enhances the noise barrier benefits of berms and provides shielding from existing topography without berms.

The mining operation will have mobile noise sources for the overburden removal and sand and gravel excavation. These mining noises will not always be near a noise-sensitive location at the same time. A big mobile noise producer will be a backup alarm, which is sounded during wheel loader, bulldozer, or haul truck operations.

Summary of the Noise level Impacts

Current ambient sound levels were measured near the proposed Gaslight III Quarry Site for sand and gravel mining in Prince George's County, Md. Future sound levels due to the operations were predicted at representative existing noise-sensitive receptor locations. The measurement and analysis procedures used in this study are consistent with accepted practice. Assumptions were chosen to result in conservative noise exposure predictions. At the more distant locations, mining is likely to be inaudible most if not all of the time. Consequently, predicted mining noise levels are well within appropriate criteria and mostly lower than observed current fluctuating sound levels for the unmodified proposed mining plan.

Sound level measurements were performed during October 2023 to quantify the existing ambient noise at noise-sensitive locations near the proposed mining operation. Sound levels were sampled at various times during daytime using an attended sound level meter. Attended measurements found that 44 dBA was exceeded 90 percent of the time, 52 dBA was exceeded 50 percent of the time, and 58 dBA was exceeded 10 percent of the time—primarily due to vehicle pass-bys. The results from the unattended noise monitors also exhibited a pattern characteristic of traffic noise.

The results of the report indicate that with the construction of berms in designated locations, sound levels will be at or below 65 dBA at the property line and that no adjacent residences will be affected by noise above the 65 dBA state standard for residences. Berms are proposed adjacent to Accokeek Road are proposed to be at a minimum of 15 feet high.

The following typical restrictions on mining operations should be employed to reduce nonpoint/equipment-generated noise impacts in the surrounding area:

- 1. Mining operations on the site are restricted to the hours allowed from 7 a.m. to 7 p.m. Monday through Friday and 7 a.m. to 4 p.m. on Saturdays, excluding federal holidays. There are no operations on Sundays.
- 2. The noise mitigation berms shall be located as shown on the plans submitted to protect nearby residential buildings and properties. All berms shall be a minimum of 15 feet high.
- 3. Trucks should not use compression or "Jake" brakes both on-site and on the haul road.
- 4. Speeds on-site should be restricted to 15 mph for all heavy vehicles.
- 5. All machinery should be kept in good working order, especially mufflers, to ensure quiet operation.
- 6. The volume of backup warning devices should be minimized while still meeting OSHA (Occupational Safety and Health Administration) standards. OSHA standards require that the backup warning device must "be clearly audible in its operating environment." This allows the warning device to be turned down as long as it can be clearly heard in its environment.

5.5.3 Visual Aesthetics

Currently, the site is entirely wooded with understory and canopy layers of various deciduous and evergreen tree species. A viewshed study was performed, and five transects (viewpoints) were performed to determine if the proposed mining activities would be visible from the adjacent and butting existing residential properties. There are a limited number of dwelling or structure groupings within the potential viewshed of the application site, according to the viewshed study.

The five viewpoints areas are identified as:

- **Viewpoint A** Residence on north side of Accokeek Road 3360 feet west of the intersection with Accokeek Road and Danville Road.
- **Viewpoint B** Residence on north side of Accokeek Road- 2640 feet west of the intersection with Accokeek Road and Danville Road.
- **Viewpoint C** Residence on south side of Accokeek Road- 980 feet west of the intersection with Accokeek Road and Danville Road.
- **Viewpoint D** Residence on south side of Accokeek Road- 866 feet west of the intersection with Accokeek Road and Danville Road.
- **Viewpoint E** Residence on north side of Accokeek Road- 234 feet east of the intersection with Accokeek Road and Danville Road.

The visual impacts of this application have been placed in two categories for evaluation purposes. The first type of visual impact is visibility of the mining operation from dwellings or structures within the potential viewshed of the application site. These are site-specific and are based on a specific point of view, usually a dwelling. Impacts are evaluated by reviewing cross-sections from identified viewing points toward the application site.

Evaluation of the sight line then considers the effect of topography, vegetation, and other mitigating factors to determine visibility between the viewpoint and the proposed activity.

The second type of visual impact is to the "rural historic landscape" as seen from the linear travel way of the designated historic roads or from the environmental setting of the historic resource (the cemetery). Evaluation of these impacts identifies the significant landscape character elements of the application site and identifies how these elements can be preserved, enhanced, or recreated.

In the evaluation of impacts, some impacts, such as clearing, are assumed to be temporary because the property is required to be reclaimed after the eight-year mining operation is complete. It has been assumed that after the mining operation is complete, it would take a minimum of 20 years for the woodland to reach its existing appearance, based on a replanting of seedlings of $\frac{1}{2}$ inch caliper and an average annual growth of $\frac{1}{2}$ inch of caliper per year.

Five critical viewpoints were identified for evaluation of screening opacity along the sight lines from the viewing point to the application site. Because the topography is quite flat throughout this area, and the proposed operation will lower the ground elevation, the major delineating element of the viewshed is the existing vegetation.

Evaluation of the Predicted Impacts

The application proposes to provide screening by the retention of woodland buffers of varying widths, combined with a 15-foot-high berm in locations as shown on the TCP2 Plan. Where the berm is proposed, it is assumed to have 100 percent winter and summer screening opacity for any operation that does not exceed the elevation of a sight line from the critical viewpoint and tangent to the top of the berm.

Assuming that complete screening (100 percent winter screening opacity) is the desired standard between the proposed sand and gravel operation and exterior viewpoints, a quantitative screening analysis was performed to determine the opacity value for the project as designed from the five critical viewpoints. Table 5.9, Summary of Visual Impacts from Critical Viewpoints, summarizes the screening proposed for each viewpoint and the resultant opacity.

All of the viewpoints achieve complete screening (100 percent winter screening opacity) through the use of existing woodlands and/or a proposed berm to a sight line elevation determined by the distance from the top of the berm to the critical viewpoint. Screening of elements above the sight line, and therefore visible over the berm, has not been reviewed as part of this evaluation because no elements with this elevation were identified in the application statement.

Table 5.9 Summary of Visual Impacts from Critical Viewpoints

Viewpoint ID	Distance	Distance	On-Site	Screening
and Location	from	From	Screening Proposed	Opacity
	Application	Proposed		
	Site	Activity		
Viewpoint A:	70 feet	335 Feet	40-foot-wide woodland buffer +	100 percent
Residence, north side			0-foot-wide landscaped berm, 0	
of Accokeek Road			feet high	
Viewpoint B:	70 feet	215 feet	40-foot-wide woodland buffer +	100 percent
Residence, north side			65-foot-wide landscaped berm,	
of Accokeek Road			15 feet high	
Viewpoints C:	40 feet	162 feet	50-foot-wide woodland buffer +	100 percent

Residence, north side			65-foot-wide landscaped berm,	
of Accokeek Road			15 feet high	
Viewpoints D:	500 feet	379 feet	50-foot-wide woodland buffer +	100 percent
Residence, south side			65-foot-wide landscaped berm,	
of Accokeek Road			15 feet high	
Viewpoint E:	290 feet	343 feet	50-foot-wide woodland buffer +	100 percent
Residence, north side			0-foot-wide landscaped berm, 0	
of Accokeek Road			feet high	

5.5.4 Scenic and Historic Roads

Existing Conditions

The application site is largely located in the Piscataway-Danville Rural Living Area of Subregion V, which is proposed for suburban-estate and low-density planned neighborhoods. The Subregion V Master Plan (M-NCPPC, 2013) designated portions of Accokeek Road as a historic road as defined by the Road Ordinance of Prince George's County, Maryland. The application site has 2,300 linear feet of frontage on Accokeek Road, which has been designated as a historic road.

A historic road is defined in the Road Ordinance of Prince George's County, Maryland as "a public or private road which has been documented by historic surveys and which maintains its historic alignment and historic landscape context through views of natural features, historic landscape patterns, historic sites and structures, historic farmstead groupings, or rural villages."

A rural historic landscape, as defined by the National Register of Historic Places, "is a geographically definable rural area, possessing a significant concentration, linkage, or continuity of historic landscape characteristics that are united by human use, past events or physical development."

Accokeek Road

Accokeek Road between Bealle Hill Road and MD 5 (Branch Avenue) is listed in the *Historic Sites and District Plan.* Research indicates that this road, from the Lower Chapel at Accokeek to the four-road intersection at Branch Avenue was in use by 1739 and was identified in the 1828 Road Survey as Road 13 in Election District 5. The Subregion 5 Master Plan designated Accokeek Road as a historic road because it generally follows the original road right-of-way. The rural historic landscape was described as farm fields surrounded by forest edge and long views of crop land separated by hedgerows. Suburban development is a localized intrusion.

The Subregion 5 Master Plan indicates that MD 373 (Accokeek Road) in this section is proposed to be upgraded to an arterial (A-55) of four lanes located in a 120-foot right-of-way. The special exception plan does not indicate the ultimate right-of-way for this improvement. Only an employee and visitor access entrance to the sand and gravel mining operation is proposed from Accokeek Road.

The application site has approximately 2,300 feet of linear frontage on Accokeek Road, which is entirely wooded. The site is relatively flat adjacent to Accokeek Road, which allows extended views into the woods. The woodlands along Accokeek Road are characterized as mixed hardwoods with White pines and American Holly dominated by white oak with an average diameter of 12 inches, with a range from 5 to 28 inches. The canopy closure is greater than 90 percent, and the shrub layer is sparse.

The "historic rural landscape" and significant scenic element of this frontage can be characterized as extensive woodlands. Woodlands are a "historic rural landscape" in the rural areas of Prince George's County, with a re-occurring pattern of clearing for agricultural purposes and regeneration to woodlands over time.

Evaluation of Predicted Impacts

The retention of the significant visual elements of the "historic rural landscape" is the objective in finding compatibility with the designated historic road, Accokeek Road. The significant rural landscape characteristic of the site was identified as the existing extensive woodlands. Any constructed feature proposed on-site to mitigate visual impacts is not considered part of the resource to be protected and, as such, is not part of the evaluation of impacts on the resource to be preserved.

The historic rural landscape can be retained if a sufficient width of existing trees is maintained along the road frontage. The depth needed is dependent on the type of trees present, their age, density, and quality of understory. In addition, the depth is based on winter vegetation characteristics when the screening opacity of the woodlands is least effective.

Table 5.10 provides the historic roads and historic resources and includes a summary of proposed impacts on the historic roads and historic resources.

Table 5.10 Evaluation of Visual Impacts on Historic/Scenic Roads

ELEMENT	Exposure to Impacts	Proposed Impacts	Evaluation of Impacts
Accokeek Road (historic road)	Site has approximately 2,300 feet of frontage on Accokeek Road	Woodland clearing along Accokeek Road for employee access to mining area	Limit woodland clearing for employee access entrance.
McKendree Church Cemetery (Historic Resource 85A-20) Material Transfer to Storage Piles	Site is approximately 2,500 feet east of mining site on north side of Accokeek Road	No Impact	N/A
Asbury Church and cemetery (Historic Resource 84-014) Material Loading to Conveyor	Site is 1,200 feet west of mining site on north side of Accokeek Road	No Impact	N/A
Cole House (Historic Resource 84-012) Conveyor	Site is approximately 5,050 feet (by road) north of mining site on east side of Danville Road	No Impact	N/A

5.5.5 Historic Resources

Existing Conditions

According to the Prince George's County *Historic Sites and Districts Plan* (M-NCPPC, March 1992), the McKendree Church Cemetery (Historic Resource 85A-20) located east of the site on the north side of Accokeek Road, the Asbury Church and cemetery (Historic Resource 84-014) west of the site on Accokeek Road, and the Cole House (Historic Resource 84-012) north of the site on Danille Road are the only historic resources located within one mile of the application site (Table 5.10). These sites are listed in the Inventory of Historic Resources and are protected by the Prince George's County Preservation Ordinance and by state law.

85A-020 McKendree Methodist Church

The McKendree Methodist Church Site and Cemetery was the former site of the McKendree Methodist Episcopal Church. The church was demolished in 1922. Today, no remnant of the church remains, and the entire property is used for the cemetery. The cemetery is in fair condition, with woods surrounding it and, in some cases, encroaching on the graves on the south, west, and north sides. The earliest graves in the cemetery date from 1842 and continue up until 1963. The graves are distributed in seven areas. Two of the areas have a cement curb surrounding them, and one area has a wrought iron fence surrounding it. Many earlier graves are marked with both head and footstones. Footstones often contain the initials or full name matching that of the headstone. There are presently 120 grave markers within the cemetery.

A majority of the grave markers from the nineteenth century are of marble and limestone, with occasional granite markers, while twentieth-century markers are almost exclusively of grey granite. There are a total of 120 known graves within the cemetery.

84-014 Asbury Church and Cemetery

Asbury United Methodist Church is significant as one of the earliest churches founded by African-Americans in Prince George's County in the two decades following the Civil War. Other churches include Union Chapel (1865), Mt. Hope (1891), St. Luke (1877), John Wesley (1866), Union Bethel (1890), and Gibbons (1884). These rural churches not only served the congregation's spiritual needs but provided social and educational activities that helped to develop a sense of community and self-determination among African-Americans in an era when their political, social, and economic opportunities were limited by the failure of Reconstruction-era reforms and the strictures of government-sponsored segregation. Unlike many of the other churches, Asbury still exists as an independent congregation. The church can count among its current membership descendants of many of its founding families, including Ducketts, Moores, Brooks, Neales, and Pinkneys. Asbury United Methodist Church is included as a historic resource in the Prince George's County Plan of Historic Sites and Districts (1992).

84-012 Frederick Coe House

The Frederick Coe House is an 1896 vernacular farmhouse located in Brandywine, Prince George's County. The two-story frame residence was constructed according to an I-House form atop a brick pier foundation according to construction methods common in southern Prince George's County at the turn of the twentieth century. The house has been expanded several times since 1896, first with a two-story rear ell and later with a one-story rear addition; the building reached its current form by 1965 at the latest. Several exterior remodeling campaigns have diminished the house's overall integrity. The Coe family, which constructed the house and owned the surrounding property until the mid-twentieth

century, worked agricultural land in the region near Piscataway from the period of the American Revolution. By the time the house was constructed in 1896, the Coe family owned several hundred acres of farmland in the rural portion of Prince George's County. Following the sale of 150 acres of the property in 1940, the Coe estate was subdivided into smaller parcels. The residence sat vacant for a period of time before a recent remodeling in the twenty-first century. The Frederick Coe House is significant for its vernacular building typology and association with the rural, agricultural landscape of southern Prince George's County during a period of suburbanization and industrialization across the greater region.

Historic Preservation Planning Guidelines in the Subregion V Master Plan include the following:

"3. ... Views from the historic resource should be considered in establishing the configuration and size of open space buffers in new developments. Sensitive and innovative site design techniques, such as careful siting, variation in orientation, roof shape, building materials, screening, landscaping, berm-ing, and open space shall be incorporated into the proposal to minimize any adverse impacts to the resource."

With regard to archaeological resources, a Phase I archaeological survey was submitted as part of this application. The Phase I archaeological survey focused subsurface testing in the high and moderate sensitivity areas. Low-sensitivity areas were inspected and judgmentally tested to confirm soil conditions and archaeological potential. A total of 817 shovel test pits were excavated.

The survey identified six prehistoric sites: 18PR1261, 18PR1262, 18PR1263, 18PR1264, 18PR1266, 18PR1267; one historic archaeological site: 18PR1268; and one multi-component site – 18PR1265, containing both historic and prehistoric components. Six isolated finds, consisting of four non-diagnostic prehistoric finds (TRC-IF-2, TRC-IF-4, TRC-IF-5, and TRC-IF-6) and two historic artifacts (TRC-IF-1 and TRC-IF-3) were also identified. The prehistoric sites consist of small lithic scatters attributed to temporary camps dating to the general prehistoric period; the historic site (18PR1268) consists of an abandoned, collapsing residential structure; and the multi-component site (18PR1265) consists of the remains of a small farmstead that includes abandoned, collapsing structures with associated historic deposits dating from the late-nineteenth century to the late-twentieth century, and a single prehistoric lithic artifact. The prehistoric sites, isolated finds, and the historic site (18PR1268) are recommended not eligible for the National Register of Historic Places. The eligibility status of 18PR1265, the former farmstead, is undetermined; however, the site is located within one of seven proposed Woodland Preservation Areas and would not be impacted by the proposed mining.

Evaluation of Predicted Impacts

The retention of the significant visual elements of the "historic rural landscape" is the objective in finding compatibility with the historic resource. The significant rural landscape characteristic of the site was identified as the existing extensive woodlands. The appearance of extensive woodlands can be retained if a sufficient width of existing trees is maintained along the road frontage. The depth needed is dependent on the type of trees present, their age, density, and quality of understory. In addition, the depth would need to be based on winter vegetation characteristics when the screening opacity of the woodlands is least effective. Any constructed feature proposed on-site to mitigate visual impacts is not considered part of the resource to be protected and, as such, is not part of the evaluation of impacts on the resource to be preserved.

Since the three identified sites—the McKendree Church Cemetery (Historic Resource 85A-20), the Asbury Church and cemetery (Historic Resource 84-014), and the Cole House (Historic Resource 84-012)—are not abutting or adjacent properties and there will be a proposed 40 to 50 feet wide

existing woodland buffer along Accokeek Road, there will be resulting in no discernible visual impacts.

5.5.6 Mount Vernon Viewshed Area of Primary Concern

A small section of the application area along Accokeek Road is identified within the Mount Vernon Viewshed Area of Primary Concern. The proposed mining activities will not affect this viewshed area due to the proposed woodland buffer and the excavation into the existing flat topography. Mount Vernon is over 8.5 miles away from the mining site.

6.0 MITIGATION OF ADVERSE IMPACTS

6.1 Land

Standard best management practices for sediment control are proposed. After mining is complete, the contours will be completed as noted on the reclamation plan, and the overburden will be redistributed across the site. Acceptable fill materials will be used on-site. Upon completion of the restoration process, the area shall be suitable for open space purposes. If future applications propose a use other than open space, the TCP2 shall be revised to provide appropriate protection of the reforestation edge.

6.2 Water

The primary pollutant of surface water from sand and gravel mining is sediment. There are several sediment control basins and traps proposed for the mining operation. These devices are standard best management practices. The basin is proposed to be removed at the end of the reclamation of the site; the sediment and erosion control plan shows the site to be re-graded back to conditions similar to those that exist today.

A Water Quality Certification (COMAR 26.08.02.10) is required for any activity that may result in any discharge to navigable waters unless the applicant provides a certification from the state that the activity does not violate state water quality standards or limitations. Discharges permitted by the state under the NPDES are certified by MDE. Grading, erosion, and sediment control plans are required by the Prince George's County Soil Conservation District to ensure local water quality and water quantity standards are met. All proposed impacts to waterways must obtain proper permits to ensure that anti-degradation policy and water quality standards are upheld.

A hydrologic evaluation report was prepared by GTA. The report indicates that the depth of mining is not expected to alter ground water levels because mining is not proposed to occur to a depth below the existing water table. No dewatering is proposed. Only mineral extraction is planned, and no washing or processing of raw material is proposed on-site. No impacts to surrounding wells are anticipated; however, the applicant has committed to providing new wells for any property owner whose well is affected by the mining.

6.3 Air

The two main air-related concerns with regard to the subject application are PM and carbon monoxide.

Mitigation for Predicted Impacts on Ambient Particulate Matter (PM) Levels

The following mitigation measures are recommended with regard to proposed site conditions, equipment, and processes to mitigate particulate matter emissions.

They will be addressed as appropriate through the special exception approval process.

- 1. The interior mining haul roads shall be maintained with a water truck or other approved dust control methods. No truck hauling is proposed on Accokeek Road.
- 2. Asphalt, oil, water, or suitable chemicals shall be applied on dirt roads, materials stockpiles, and other surfaces which can create airborne dusts.
- 3. Open-bodied vehicles transporting materials shall be covered at all times when in motion in accordance with COMAR regulations.
- 4. The site shall have a 15-mph speed limit to reduce dust generation from travel on the unpaved haul road.
- 5. All mobile equipment to be used on-site shall use ultra-low sulfur diesel fuel. The fuel supplier certification of the sulfur content of each fuel delivery shall be kept on-site for the duration of the special exception approval period.

Mitigation for Predicted Impacts on Ambient Carbon Monoxide Levels

The use of ultra-low diesel fuel to minimize the impact of the project on air quality should be considered.

6.4 Biota

The TCP2 shows the preservation of woodlands within the regulated areas of the site (streams, wetlands, and floodplain and their associated buffers). Prior to installation of reclamation plantings, a conservation easement will be recorded in the land records to protect these areas. It is recommended that the on-site planting meet the site's WCT at a minimum.

The TCP2 will need to address the proper soil preparations needed for the planting of woodlands on the reclaimed soil that will remain.

6.5 Human-Related

6.5.1 Transportation

The analyses of the proposed mining application were predicated on two operational assumptions. These assumptions are as follows:

- All extracted materials will be transported on-site to an elevated conveyor system.
- The conveyor system would transport the materials to the adjacent wash plant currently operating under Special Exception SE-4790. Aside from the conveyor system, there is no haul route for this site.
- Traffic to and from the site will be limited to employees and visitors to the site.

No additional traffic mitigation measures are recommended.

6.5.2 Noise

The following typical restrictions on mining operations should be employed to reduce nonpoint/traffic-generated noise impacts in the surrounding area:

- 1. Mining operations on the site are restricted to the hours allowed from 7 a.m. to 7 p.m. Monday through Friday and 7 a.m. to 4 p.m. on Saturdays, excluding federal holidays. There are no operations on Sundays.
- 2. The noise mitigation berms shall be located as shown on the plans submitted to protect nearby residential buildings and properties. All berms shall be a minimum of 15 feet in height.
- 3. Trucks should not use compression or "Jake" brakes both on-site and on the haul road.
- 4. Speeds on-site should be restricted to 15 mph for all heavy vehicles.
- 5. All machinery, especially mufflers, should be kept in good working order to ensure quiet operation.
- 6. The volume of backup warning devices should be minimized while still meeting OSHA (Occupational Safety and Health Administration) standards. OSHA standards require that the backup warning device must "be clearly audible in its operating environment." This allows the warning device to be turned down as long as it can be clearly heard in its environment.

6.5.3 Visual Aesthetics

Minor impacts to the viewshed are anticipated with this application because the mining area is located near (50 feet woodland buffer) Accokeek Road. There is a proposed employee access entrance off Accokeek Road, which will be approximately 90 feet wide of woodland clearing. Proposed mitigation measures off Accokeek Road will be a 50-foot existing woodland buffer and a 15-foot-high, planted earthen berm along the mining limits of disturbance. No additional mitigation measures are required.

APPENDIX A

MARYLAND DEPARTMENT OF THE ENVIRONMENT LAND AND MATERIALS ADMINISTRATION

SURFACE MINING PERMIT RENEWAL



SURFACE MINE PERMIT NO.: 14-SP-1109

PERMIT EFFECTIVE DATE: April 20, 2015

PERMIT EXPIRATION DATE: April 20, 2025

Pursuant to Title 15, Subtitle 8 of the Environment Article, Annotated Code of Maryland (2014 Replacement Volume), the Land and Materials Administration hereinafter referred to as "the Administration" hereby authorizes the renewal of the above referenced surface mining permit;

PERMITTEE:

Bardon, Inc.

6401 Golden Triangle Drive

Suite 400

Greenbelt, Maryland 20770

The permittee is authorized to engage in a Surface Mining Operation known as Gaslight #2 and located: MD Route 5 to MD Route 373 (Accokeek Road) west to intersection with McKendree Road, site on left in Prince George's County; as described in the approved Mining and Reclamation Plan dated March 26, 2020 and drawings dated December 2013 and prepared by Ben Dyer Associates, Inc. The permit area shall not exceed 321.0 acres as shown on the aforementioned Mining and Reclamation Plan and drawings.

PERMIT TO SURFACE MINE NO. 14-SP-1109 Page Two

- Other Authorizations -- This permit is issued in addition to, and not in substitution of, the
 requirements of other permits or authorizations granted for the surface mining operation.
 Issuance of this permit does not relieve the permittee of the obligation to obtain and
 comply with all other required authorizations.
- Permit Transfer -- The permit is valid only for use by the Permittee and may not be transferred to another unless written permission for such transfer is obtained from the Administration.
- Voiding of Permit -- The permit shall become void if the surface mining operation authorized under the Permit has not begun on or before April 20, 2017.
- Permit on Site -- A copy of the approved Mining and Reclamation Plan, and the permit
 are to be kept at the mining site available for reference during the period that the permit is
 in effect.
- 5. <u>Permit Modification</u> -- Any changes in land areas stipulated in the permit, mining or reclamation practices, schedule of reclamation, and planned land use must have the prior written approval of the Administration. The approval shall be requested by submission of an application for a permit modification or new application.
- 6. <u>Departmental Modification</u> -- The Administration may modify the permit upon giving the permittee notice and providing an opportunity for an administrative hearing.
- 7. Compliance with Law/Regulation and Permit -- All surface mining operations shall be conducted in compliance with Environment Article 15-801 through 15-834, COMAR 26.21.01 through 26.21.04 inclusive, and the surface mine permit. The permit may be suspended or revoked by the Administration for violation of the surface mine law, regulations, this permit, or any other required approval. The location, dimensions, and type of all structures, reclamation practices and all excavation and filling shall be in accordance with the approved Mining and Reclamation Plan and map.
- 8. <u>Abandoned Operation</u> -- The surface mining operation shall be considered abandoned if no mineral has been produced or overburden removed for a period of one (1) year and the operator has vacated the site of the operation without having complied with all the requirements of the permit.
- Halted Operation -- The surface mining operation shall be considered halted if active
 work has ceased temporarily due to weather or market conditions, or other reasonable
 cause. An operation may not be halted for a period exceeding twenty-four (24) months.
 All pollution controls shall be maintained during this period.

PERMIT TO SURFACE MINE NO. 14-SP-1109 Page Three

- 10. Staking Permitted Area -- The permittee shall mark each corner of the perimeter of the permitted area by placing permanent markers. In addition, the permittee shall place markers along the perimeter of the permitted area no more than two hundred feet (200') apart. The markers shall be no less than three feet (3') above the ground. All of the required markers shall be in place no later than ten (10) days from the effective date of this permit and shall be maintained by the permittee throughout the life of the permit.
- 11. Haul and Access Roads -- No mud may be tracked onto the public roads. All haul and access roads shall be treated for dust and mud control by the permittee as required by approved Mining and Reclamation Plan and drawings. Should these methods fail to control the dust and mud, the permittee shall treat the roads as directed by the Administration.
- Completion of Reclamation -- Reclamation activities shall be completed in accordance
 with the approved Mining and Reclamation Plan and drawings no later than six (6)
 months after termination of mining on any segment of permit area.
- 13. Annual Mining and Reclamation Report -- At the end of each calendar year, but before March 31st of the succeeding year, the permittee shall submit an annual mining and reclamation report to the Administration on a form prescribed and furnished by the Administration.
- 14. Compliance with Non-Tidal Wetlands Regulations -- Maintenance, including excavation or dredging, of wash ponds or sediment control structures is authorized under this permit and COMAR 26.23.01.02.F. Non-tidal Wetlands created incidental to the mining activity authorized under this permit may be reclaimed in accordance with the approved Mining and Reclamation Plan. Any wetlands remaining upon completion of the reclamation authorized by this permit will be regulated pursuant to COMAR 26.23.01 through .06.
- 15. <u>Annual Permit Fee</u> -- The permittee shall remit an annual permit fee of \$1,000.00. The annual fee is due by April 30th, of each year. Failure to submit the fee by the prescribed date shall be considered as a violation of this permit subject to further administrative action.
- 16. Performance Bond -- The required bond(s) for the above referenced permit consist of Surety Bond number 58714879 issued by Western Surety Company in the amount of \$401,250.00. Failure to maintain the required bond may result in the suspension/ revocation of the permit and forfeiture of the bond.

PERMIT TO SURFACE MINE NO. 14-SP-1109 Page Four

17. MHT Avoidance Plan -- Bardon, Inc. is required to adhere to the Maryland Historic Trust avoidance plan. MHT is requiring Phase II evaluative testing be conducted (prior to construction) at two of the archeological sites that were identified during the Phase I study - sites 18PR1079 and 18PR1081. Bardon, Inc. is required to preserve the two identified sites utilizing recommended standards outlined in the MHT avoidance plan.

STEPHANIE COBB-WILLIAMS, DEPUTY DIRECTOR LAND AND MATERIALS ADMINISTRATION

July 20, 2020 DATE



Wes Moore, Governor Aruna Miller, Lt. Governor

Serena McIlwain, Secretary Suzanne E. Dorsey, Deputy Secretary

June 12, 2024

Tim Bevard Bardon, Inc. 6401 Golden Triangle Drive, Suite 400 Greenbelt, MD 20770

RE:

Accokeek Road Site (Gaslight)

No. 04-SP-0969

Surface Mine Permit Renewal

Dear Tim Bevard:

Enclosed please find the Renewal of Surface Mine Permit No. 04-SP-0969. The review of this renewal has been completed pursuant to Title 15, Subtitle 8 of the Environment Article §5-204, Annotated Code of Maryland and COMAR 26.21.01.01 through .30.

You are authorized to conduct surface mining at the site described in the permit. Please become familiar with all conditions attached to the permit.

Your cooperation throughout the process has been appreciated. Please call me if you have any questions at (410) 537-3557.

Sincerely,

Molly Michaelson, C.P.G.

Program Manager, Mining Program

dly Munaclson

Enclosure

MARYLAND DEPARTMENT OF THE ENVIRONMENT LAND AND MATERIALS ADMINISTRATION

SURFACE MINING PERMIT RENEWAL



SURFACE MINE PERMIT NO.: 04-SP-0969-B

PERMIT EFFECTIVE DATE: May 20, 2004

PERMIT EXPIRATION DATE: May 31, 2029

Pursuant to Title 15, Subtitle 8 of the Environment Article. Annotated Code of Maryland (2014 Replacement Volume) ("Environment Article"), the Land and Materials Administration ("the Administration") hereby authorizes the renewal of the above referenced surface mining permit;

PERMITTEE:

Bardon, Inc.

6401 Golden Triangle Drive

Suite 400

Greenbelt, Maryland 20770

The permittee is authorized to engage in a Surface Mining Operation known as Accokeek Road Site (Gaslight) and located: MD Route 5 to MD Route 373 (Accokeek Road) west to intersection with McKendree Road, site on left in Prince George's County; as described in the approved Mining and Reclamation Plan dated April 17, 2024 and drawings dated February 10, 2004 and prepared by Morris & Ritchie Associates. Inc. and drawings dated October 3, 2007 prepared by Aggregate Industries to show the additional fines containment pond. The permit area shall not exceed 511.0 acres as shown on the aforementioned Mining and Reclamation Plan and drawings.

PERMIT TO SURFACE MINE NO. 04-SP-0969-B Page Two

- Other Authorizations -- This permit is issued in addition to, and not in substitution of, the
 requirements of other permits or authorizations granted for the surface mining operation.
 Issuance of this permit does not relieve the permittee of the obligation to obtain and
 comply with all other required authorizations.
- Permit Transfer -- The permit is valid only for use by the Permittee and may not be transferred to another unless written permission for such transfer is obtained from the Administration.
- 3. Permit on Site -- A copy of the approved Mining and Reclamation Plan, and the permit are to be kept at the mining site available for reference during the period that the permit is in effect.
- 4. <u>Permit Modification</u> Any changes in land areas stipulated in the permit, mining or reclamation practices, schedule of reclamation, and planned land use must have the prior written approval of the Administration. The approval shall be requested by submission of an application for a permit modification or new application.
- 5. <u>Departmental Modification</u> -- The Administration may modify the permit upon giving the permittee notice and providing an opportunity for an administrative hearing.
- 6. Compliance with Law/Regulation and Permit -- All surface mining operations shall be conducted in compliance with Environment Article §§ 15-801 through 15-834, Code of Maryland Regulations (COMAR) 26.21.01 through 26.21.04 inclusive, and the surface mine permit. The permit may be suspended or revoked by the Administration for violation of the surface mine law, regulations, this permit, or any other required approval. The location, dimensions, and type of all structures, reclamation practices and all excavation and filling shall be in accordance with the approved Mining and Reclamation Plan and drawings.
- 7. <u>Abandoned Operation</u> -- The surface mining operation shall be considered abandoned if no mineral has been produced or overburden removed for a period of one (1) year and the operator has vacated the site of the operation without having complied with all the requirements of the permit.
- 8. <u>Halted Operation</u> -- The surface mining operation shall be considered halted if active work has ceased temporarily due to weather or market conditions, or other reasonable cause. An operation may not be halted for a period exceeding twenty-four (24) months. All pollution controls shall be maintained during this period.

PERMIT TO SURFACE MINE NO. 04-SP-0969 -B Page Three

- 9. Staking Permitted Area -- The permittee shall mark each corner of the perimeter of the permitted area by placing permanent markers. In addition, the permittee shall place markers along the perimeter of the permitted area no more than two hundred feet (200') apart. The markers shall be no less than three feet (3') above the ground. All of the required markers shall be in place no later than ten (10) days from the effective date of this permit and shall be maintained by the permittee throughout the life of the permit.
- 10. Haul and Access Roads -- No mud may be tracked onto the public roads. All haul and access roads shall be treated for dust and mud control by the permittee as required by approved Mining and Reclamation Plan and drawings. Should these methods fail to control the dust and mud, the permittee shall treat the roads as directed by the Administration.
- 11. <u>Completion of Reclamation</u> -- Reclamation activities shall be completed in accordance with the approved Mining and Reclamation Plan and drawings no later than six (6) months after termination of mining on any segment of permit area.
- 12. <u>Annual Mining and Reclamation Report</u> -- At the end of each calendar year, but before March 31st of the succeeding year, the permittee shall submit an annual mining and reclamation report to the Administration on a form prescribed and furnished by the Administration.
- 13. Compliance with Non-Tidal Wetlands Regulations -- Maintenance, including excavation or dredging, of wash ponds or sediment control structures is authorized under this permit and COMAR 26.23.01.02.F. Non-tidal Wetlands created incidental to the mining activity authorized under this permit may be reclaimed in accordance with the approved Mining and Reclamation Plan. Any wetlands remaining upon completion of the reclamation authorized by this permit will be regulated pursuant to COMAR 26.23.01 through .06.
- 14. <u>Annual Permit Fee</u> -- The permittee shall remit an annual permit fee of \$1,000.00. The annual fee is due by May 31st, of each year. Failure to submit the fee by the prescribed date shall be considered as a violation of this permit subject to further administrative action.
- 15. Performance Bond -- The required bond(s) for the above referenced permit consist of Surety Bond number 929509311 issued by Western Surety Company in the amount of \$638,750.00. Failure to maintain the required bond may result in the suspension/revocation of the permit and forfeiture of the bond.

PERMIT TO SURFACE MINE NO. 04-SP-0969-B Page Four

16. Land Disturbance -- There shall be a minimum of land disturbance. At no time will there be more than ninety (90) acres disturbed for mining purposes. Additional land disturbance may include, haul/access roads, stockpiles, berms and sediment controls. Berms and sediment controls will not be considered disturbed if vegetatively stabilized in accordance with the approved Mining and Reclamation Plan. Product stockpiles will not be considered part of the disturbance limit when contained within designated area. Previously disturbed land shall be considered no longer disturbed when graded, limed, fertilized and seeded in accordance with the approved Mining and Reclamation Plan. At all times it shall be the Department's determination whether land is disturbed.

Milly Muchaelan		6
Molly Michaelson, C.P.G.		Date
Program Manager, Mining Program	*	

Wash Plants between one and five miles from SE-22007

	SPECIAL	PERMIT	PERMIT			ACCESS	PRINT ID		
DBJECTID	EXCEPTION	NUMBER	STATUS	NAME	REMARKS	ID	NUMBER	SHAPE AREA	SHAPE LEN
				A H Smith					
				Property &					
8			Α	Wash Plant		1001	Yes	7667815.783	14023.20034

Wash Plants within one mile of SE-22007

SPECIAL	PERMIT	PERMIT			ACCESS	PRINT ID		
EXCEPTION	NUMBER	STATUS	NAME	REMARKS	ID	NUMBER	SHAPE AREA	SHAPE LEN
			Bardon					
SE-4403		Α	Plant		1010	Yes	2761249.745	6374.893429

SPECIAL	ACCESS	REMARKS	PRINT ID	SHAPE AREA	SHAPE LEN
EXCEPTION	ID		NUMBER		
SE-4348	113	Old SE-4113. Reclaimed, Tim Bevard, Aggregate Ind, 6/07	Yes	4867167.968	11301.47531
	11		Yes	1319887.113	5247.844253
SE-3272	39		Yes	3931440.466	8161.736404
SE-4154	105		Yes	12378634.38	14185.41405
NCU	10		Yes	2842207.375	8813.709524
SE-1311	93	Old permit# 77-SP-0068 and ID#20	Yes	4027777.182	12785.37794
SE-4647			No	21771319.77	44448.15864
SE-4154	105		Yes	2836627.853	7444.581717
	72	Old permit#77-SP-0024 and ID#9	Yes	946164.4361	4212.692815
	32		Yes	1953553.277	6477.475895
SE-2970	83		Yes	4890555.481	11417.68559
SE-3064	39		Yes	3272955.308	7208.509264
SE-3371	66		Yes	2824004.513	7523.666746
	24		Yes	5339382.519	9606.923449
SE-4350	99	Old SE-4145 and SE-3844	Yes	6494551.233	11900.40259
	49		Yes	3635321.437	8796.157249
SE-3086	37		Yes	4848077.128	10519.22553
SE-3370	66		Yes	371341.3457	2579.461103
SE-3558	82		Yes	6300902.117	14199.67743
SE-3810	90		Yes	2928991.735	9227.481
SE-4479	117	Old SE-4218	Yes	11704823.32	14772.04062
SE-3755	70	Old SE-3266	Yes	15068851.52	22435.17918
	21		Yes	8686274.71	11575.05311
SE-4102	112	Audrey Scott ID 6/07, indicates boundaries large than poly	Yes	7960846.662	13054.55256
	45		Yes	795769.2881	4806.873961
	65		Yes	4041916.547	9430.19928
SE-4334	118		Yes	4734226.739	14864.48522
SE-3273	59		Yes	2625646.045	6643.88883
SE-4043	109		Yes	3480769.767	11761.35425
SE-4485	130		Yes	1157673.252	5547.368617
SE-4230	88	Old SE-4000	Yes	10909207.4	15086.07729
	13		Yes	4603363.008	10382.89781
	21		Yes	235322.461	4235.404577
SE-3253	68		Yes	2402356.215	7581.31641
NCU	122	New MDE permit with expansion of mining on same property wi	Yes	7233902.332	13564.79698
	81	Old Permit# 82-SP-0116 and ID#53	Yes	1465012.981	5308.33322
SE-4429	115	Old SE-4194 & SE-3903; Old Permit # 81-SP-0104 and ID#52	Yes	7389439.797	12999.30626
	17		Yes	1349536.374	6424.136883

Surface Mines within a five-mile radius of SE-22007

APPENDIX B

References

Canter, Larry W. (1996). *Environmental Impact Assessment*. Boston, Massachusetts. Irwin McGraw-Hill.

U.S. Environmental Protection Agency, National Ambient Air Quality Standard, Retrieved November 2024, from www.epa.gov/naaqs.

U.S. Department of Agriculture, Natural Resource Conservation Service, Retrieved November 2024, from www.websoilsurvey.NRCS.USDA,GOV

Maryland Department of the Environment, Retrieved November 2024, from Air Quality Forecast

Maryland Department of the Environment, Retrieved November 2024, from Water Supply

Glaser, John D., 1971, *Geology and Mineral Resources to Southern Maryland*. Maryland Geological Survey.

Maryland Department of Natural Resources, Maryland Geological Survey, 2020, *Open-File Report NO. 20-02-01*, *Potentiometric Surface Maps of Selected Confined Aquifers in Southern Maryland and Maryland Eastern Shore, 2019.*

Maryland Geological Society. Retrieved November 2024, from http://www.mgs.md.gov/esic/geo/pri.html

Maryland Geological Society. Retrieved November 2024, from www.MGS.MD.GOV

Maryland Department of Natural Resources, Maryland Natural Heritage Program, 2021, *Threatened and Endangered Plants and Animals of Maryland*.

Maryland State Climatologist Office. Retrieved November 2024, from http://www.atmos.umd.edu/~climate/

The Maryland-National Capital Park and Planning Commission, Prince George's County Planning Department. (2013). *Approved Subregion 5 Master Plan and Sectional Map Amendment*.

The Maryland-National Capital Park and Planning Commission, Prince George's County Planning Department. (2035). *Approved General Plan*.

The Maryland-National Capital Park and Planning Commission, Prince George's County Planning Department. (2017). *Countywide Green Infrastructure Plan*.

The Maryland-National Capital Park and Planning Commission, Prince George's County Planning Department. (May 2024). *Geographic Information System Data.*

The Maryland-National Capital Park and Planning Commission, Prince George's County Planning Department. (2010). *Approved Historic Sites and Districts Plan*.

The Maryland-National Capital Park and Planning Commission, Prince George's County Planning Department. (2007). *Guidelines for the Design of Scenic and Historic Roadways in Prince George's County, Maryland.*

The Maryland-National Capital Park and Planning Commission, Prince George's County Planning Department. (2018). Environmental Technical Manual.

The Maryland-National Capital Park and Planning Commission, Prince George's County Planning Department. (20202). Sand and Gravel Mining in Prince George's County – Past, Present, And Future.

The Maryland-National Capital Park and Planning Commission, Prince George's County Planning Department. (2024). *Prince George's County Woodland and Wildlife Habitat Conservation Ordinance*.