



Note: Staff reports can be accessed at www.mncppc.org/pgco/planning/plan.htm.

Special Exception

SE-4674

Application	General Data	
Project Name: Jenkins Property Location: East/northeast side of Aquasco Road (MD 381), approximately 1500 feet south of Orme Road Applicant/Address: Maryland National Resource Solution, LLC. 7500 Old Georgetown Road Bethesda, MD 20814 Property Owner: Alvin F. Jenkins 9001 Baltimore Avenue College Park, MD 20740	Planning Board Hearing Date:	07/29/10
	Staff Report Date:	06/10/10
	Date Accepted:	10/06/09
	Planning Board Action Limit:	N/A
	Plan Acreage:	81.44
	Zone:	O-S
	Gross Floor Area:	720 sq. ft.
	Lots:	0
	Parcels:	1
	Planning Area:	87A
	Tier:	Rural
	Council District:	09
	Election District	08
	Municipality:	N/A
	200-Scale Base Map:	223SE12

Purpose of Application	Notice Dates	
This case was reviewed by the Planning Board on June 24, 2010. The Planning Board has scheduled this application for a public hearing on the agenda date of July 29, 2010. Special exception for the surface mining of sand and gravel in the O-S Zone.	Informational Mailing	06/23/09
	Acceptance Mailing:	09/30/09
	Sign Posting Deadline:	N/A

Staff Recommendation		Staff Reviewer: Tom Lockard Phone Number: 301-952-3410 E-mail: Thomas.Lockard@ppd.mncppc.org	
APPROVAL	APPROVAL WITH CONDITIONS	DISAPPROVAL	DISCUSSION
	X		

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: Jimi Jones, Zoning Supervisor

FROM: Tom Lockard, Planner Coordinator

SUBJECT: **Special Exception Application No. 4674**

REQUEST: **Sand and Gravel Operation in the O-S Zone**

RECOMMENDATION: **Approval with conditions**

NOTE:

This case was reviewed by the Planning Board on June 24, 2010. The Planning Board has scheduled this application for a public hearing on the agenda date of July 29, 2010. The Planning Board also encourages all interested persons to request to become a person of record for this application.

Requests to become a person of record should be made in writing and addressed to The Maryland-National Capital Park and Planning Commission, Development Review Division, 14741 Governor Oden Bowie Drive, Upper Marlboro, MD 20772. Please call 301-952-3530 for additional information.

You are encouraged to become a person of record in this application. The request must be made in writing and addressed to the Prince George's County Office of the Zoning Hearing Examiner, County Administration Building, Room 2184, 14741 Governor Oden Bowie Drive, Upper Marlboro, MD 20772. 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.

FINDINGS:

- A. **Location and Field Inspection:** The subject property is a large, irregularly-shaped area, approximately 81.45 acres in size. It is comprised of a single-deed parcel, which has never been the subject of any prior applications, plans, or approvals. It is located on the east/northeast side of Aquasco Road (MD 381), approximately 1,500 feet south of Orme Road. The site is predominantly wooded, although sections of it were cleared for agricultural uses. The site has apparently become a dumping ground with numerous piles of trash and other debris in evidence. There are two abandoned single-family residences (one in ruins) towards the center of the site, accessed via a long driveway from MD 381. There are several other agricultural structures (tobacco barns and sheds) scattered across the site. The site plan shows all of these structures as to be removed.

- B. **Development Data Summary:**

	EXISTING	PROPOSED
Zone(s)	O-S	O-S
Use(s)	Abandoned farm	Sand & Gravel Mine
Acreage	81.45	81.45
Parcels	1	1
	Tax Map 173, Parcel 39	Tax Map 173, Parcel 39

- C. **History:** The property was retained in the Open Space (O-S) Zone in the Subregion 6 Master Plan and Sectional Map Amendment, which was approved September 15, 2009.
- D. **Master Plan Recommendation:** The 2002 *Prince George's County Approved General Plan* places this property in the Rural Tier. The vision for the Rural Tier is for the 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. This application is consistent with the 2002 General Plan Development Pattern policies for the Rural Tier, specifically, that existing natural resources be used wisely. The applicant is proposing a mining operation while preserving areas of woodland, floodplain, and other sensitive environmental features. The policy further recommends that special studies be prepared to ensure that mining operations are compatible with existing neighborhoods.

This application conforms to the recommendations of the 2009 Subregion 6 Master Plan, which shows the site as a rural land use consisting of open space and forest. Following the five-year mining period, the site will be reclaimed in accordance with state regulations. Once reclaimed, the site will be retained in open space and as a tree reclamation site, both of which further rather than impair the master plan recommendation.

- E. **Request:** The applicant is proposing a sand and gravel mining operation. The statement of justification notes that 58.6 acres of the total 81.45 acres is proposed to be actively mined. The balance of the property includes floodplain, tree conservation, wetlands, steep slopes, and bufferyards which will be preserved. Mining is shown to take place in three phases. The only structure proposed for the site is a scale house and scale to be located along the proposed access drive/internal haul road. The material is proposed to be trucked north on Aquasco Road/Brandywine Road (MD 381) to Crain Highway (US 301). From there, the material will be dispersed to job sites and processing plants throughout the region. Mining activity is proposed to

take place between the hours of 7:30 a.m. and 5:00 p.m. on weekdays and 7:30 a.m. and 3:00 p.m. on Saturdays.

Should mining not be completed within the proposed five-year timeframe, a new special exception will be required for the continuation of the mining operation.

F. **Neighborhood and Surrounding Uses:** The neighborhood is generally defined by the following boundaries.

- **North**—Baden-Westwood Road
- **East**—Croom Road (MD 382)
- **South**—Swanson Creek (Charles County boundary) and Croom Road (MD 382)
- **West**—Horsehead Road

The neighborhood is predominantly undeveloped with wooded parcels, scattered residences, sand and gravel mines, and agricultural fields.

The site is surrounded by the following uses:

- **North**—Large tracts of wooded land, reclaimed mining areas, and agricultural uses in the O-S Zone
- **Northeast**—A sand and gravel mine (SE-4462) in the O-S Zone
- **East**—Undeveloped land in the O-S Zone
- **South**—Across Aquasco Road (MD 381) are single-family residences, a vacant store, undeveloped land, agricultural uses in the O-S Zone, and the W.S. Schmidt Environmental Education Center in the R-O-S Zone
- **West**—A single-family residence and undeveloped land in the O-S Zone

G. **Specific Special Exception Requirements for a Sand and Gravel Mine**

Section 27-410 of the Zoning Ordinance permits a sand and gravel mine in the O-S Zone, subject to the following:

- (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: Heavy machinery will be used for excavation and hauling. No on-site washing, refining, or other processing is proposed.

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

Comment: The Environmental Planning Section reviewed the proposed mining operation and provided an Environmental Impact Report (EIR-4674). Air quality and noise impacts were evaluated. According to the Environmental Planning Section memorandum dated June 7, 2010 (Reiser to Lockard), EIR-4674 addressed air quality concerns. The EIR recommends conditions which address issues relating to the air shed and air quality. Staff is recommending that these conditions be made part of any approval of this application.

- (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: The applicant will be required to restore the property so that it is suitable for development. The Type II Tree Conservation Plan (TCPII/054/09) shows the existing and proposed ground elevations of the site, adjacent land, all abutting streets, and that the final grades do not exceed 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;**

Comment: The property is in the O-S Zone. Therefore, this application, if approved, would be valid for a period not to exceed five years from the date of approval. Any request for additional time will require the approval of a new special exception.

- (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: The site plan contains a note that estimates the operation will be completed within the initial five-year validity period.

- (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: The applicant has submitted the required traffic study. It proposes a maximum of 250 loads leaving the site daily, heading north on MD 381 to its intersection with US 301 and Branch Avenue (MD 5). There will be no traffic travelling to and from the site to the south on MD 381.

An analysis was conducted by Transportation Planning staff and is presented in EIR-4674. It was performed in conjunction with a traffic study, dated October 29, 2009, submitted with the application. The traffic study analyzed the transportation facilities within the approved study area based on existing conditions, as well as future conditions with and without the impact of the subject application. Copies of the traffic study can be found in the official file for the special exception application.

The analyses of the proposed application for mining were predicated on several operational assumptions. Those assumptions are:

1. The property will be mined at a rate of 250 truckloads per day, resulting in a total of 500 trips per day
2. The operations will be confined between the hours of 7:00 AM to 6:30 PM, during weekdays
3. Mining activity will be concentrated between 7:30 AM and 5:00 PM during weekdays and 7:30 AM to 3:00 PM on Saturdays.

In addition to the on-site mining activity, the application states that the haul route to be utilized will be northward on MD 381 to US 301. No trucks will use the portion of MD 381 that is south of the subject property.

The total projected traffic volumes were obtained by combining the factored site-generated truck trips with the projected background traffic volumes for the year 2011, 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 are summarized in Table 5.9.

Table 5.9 Projected Future Total Traffic for 2011 – Including the Subject Application		
Intersection	AM	PM
	LOS/Delay	LOS/Delay
MD 381 – US 301 <i>(Including mitigation; extending EB left turn lane)</i>	F/1626 E/1483	F/1628 D/1420
MD 381 – Cherry Tree Crossing Road *	C/17.5 secs	B/14.0 secs
MD 381 – North Keys Road *	C/22.1 secs	B/10.8 secs
MD 381 – Site Access *	B/15.9 secs	B/12.5 secs
	V/C Ratio	
MD 381 – US 301 to Cherry Tree Crossing Road **	0.32	0.31
MD 381 – US 301 to Cherry Tree Crossing Road**	0.32	0.31
MD 381 – Cherry Tree Crossing Road to North Keys Road **	0.38	0.35
MD 381 – North Keys Road to Gibbons Church Road **	0.39	0.33
MD 381 – Gibbons Church Road to Site Access **	0.34	0.32
* Unsignalized intersections are analyzed using the <i>Highway Capacity Manual</i> (HCM) method in accordance with the <i>Guidelines for the Analysis of the Traffic Impact of Development Applications</i> . The results show the level-of-service and the maximum delay in any movement measured in seconds/vehicle. A level-of-service “E” corresponds to a maximum delay of 50 seconds/car, which is the maximum level of delay deemed acceptable per the <i>Guidelines</i> . ** The HCM Link Analysis procedure is applied, and the resulting Volume-to-Capacity (V/C) ratio is indicated. A maximum V/C of 0.80 is acceptable per the “Guidelines.”		

The following road facilities were identified in the traffic study as the network on which the proposed development would have the most impact:

MD 381 – US 301 (Signalized)
 MD 381 – Cherry Tree Crossing Road (Unsignalized)
 MD 381 – North Keys Road (Unsignalized)

The traffic study concluded that under the provisions of mitigation (County Council Resolution CR-29-1994), with the extension of the left turn lane by 335 feet on the eastbound approach of the MD 381/US 301 intersection, the additional pavement would mitigate more than 297 percent of the site’s AM traffic, and 2,871 percent of the site’s PM traffic. The county’s guidelines require a minimum mitigation rate of 150 percent of the proposed site traffic. Consequently, the applicant’s improvement will exceed county requirements for mitigating improvements.

- (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 site plan shows a single access point from the northeast side of MD 381, near the southern point of the property. It is shown to be 22 feet in width and 200 feet in length, constructed of asphalt. The applicant asserts that the sight distance at this point is more than 1,000 feet in either direction. Signs identifying the entrance are shown a minimum of 500 feet prior to the driveway entrance in either direction. A long acceleration lane is shown for trucks turning right out of the site onto MD 381. Given the lack of pedestrians along this very rural stretch of road, it is unlikely that the entrance location would pose a danger to persons walking along the road.

- (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 inventory is contained in Appendix A of EIR-4674.

- (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.**

Comment: The subject property is in the O-S Zone, thus this section does not apply.

- (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 in the O-S Zone, thus this section does not apply.

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

Comment: The Environmental Planning Section reviewed the proposed mining operation and provided an Environmental Impact Report (EIR-4674). According to the Environmental Planning Section, memorandum dated June 7, 2010 (Reiser to Lockard), EIR-4674 addressed noise concerns. The applicant is proposing to mitigate noise reaching adjacent properties through the retention of a wooded buffer along the periphery of the property and the building of an 18-foot-high berm. The EIR recommends conditions which address issues relating to noise impacts. Staff is recommending that these conditions be made part of any approval of this application.

(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 a degrading of water quality; or**
- (4) An area containing highly erodible soils.**

Comment: The site is not within a Chesapeake Bay Critical Area (CBCA) Overlay Zone, thus this section does not apply.

(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: The proposed mining site is located in a section of the county which has long been mined for sand and gravel. An updated inventory is attached to this memorandum for the District Council's consideration. The inventory identifies one active mine in direct proximity to the subject property, and there are other mining sites within the planning area that contribute truck trips to MD 381.

H. Additional requirements for a surface mining facility

Section 27-445.02 contains the following additional requirements for a surface mining facility:

- (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: The applicant will be required to obtain all necessary permits from the State of Maryland for the operation of a surface mine, subsequent to the approval of Special Exception SE-4674. The applicant intends to operate the surface mine in accordance with all permits and any conditions attached to this application. No wet processing of material is proposed.

- (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: The recommendation at the end of this report contains conditions which address truck speed, monitoring, maintenance, and ownership.

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

Comment: Conditions are included which requires the applicant to use a water truck and sweeper truck as needed on its property and nearby roads, to minimize dust and to keep the public roads clear of debris.

- (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 will post the required signage in compliance with appropriate regulations.

- (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.**

(CB-17-1984; CB-72-1987)

Comment: The subject property is not within a Chesapeake Bay Critical Area (CBCA). No mining operations or equipment are located in any area prohibited by this provision.

- I. **Environmental Impact Report:** In addition to the required findings of the Zoning Ordinance, under Maryland State Law (Article 28 of the Maryland Annotated Code-Maryland-National Capital Park and Planning Commission Section 8-110), 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 Ordinance 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 Environmental Planning Section prepared a complete EIR during the review of this application. The EIR for this application is referred to as EIR-4674. The Environmental Planning Section provided the following comments in their June 7, 2010 memorandum:

Background

The Environmental Planning Section has not reviewed any previous development applications for the subject property. Staff reviewed and signed a Natural Resources Inventory, NRI/029/09, for the subject property. The current application requests a special exception for the surface mining of sand and gravel. The completed EIR and the associated support documentation in the official file were used in the preparation of this analysis.

Natural Resources Inventory

A signed Natural Resources Inventory, NRI/029/09, was submitted with the application. No regulated floodplain is located on-site; however, primary management area (PMA) is located on-site and is comprised of streams, wetlands, and their respective buffers, and has been expanded for adjacent steep and severe slopes.

The forest stand delineation (FSD) indicates the presence of two forest stands totaling 59.88 acres and 11 specimen trees. The Type II tree conservation plan (TCP II) and special exception plan are in general conformance with the signed NRI.

Comment: No revisions are required for conformance to the NRI.

Woodland Conservation

This property is subject to the provisions of the Prince George's County Woodland Conservation and Tree Preservation Ordinance because the gross tract area is greater than 40,000 square feet, and there are more than 10,000 square feet of existing woodlands. The TCP II as submitted was reviewed and was found to require minor revisions to meet the requirements of the Woodland Conservation Ordinance.

The woodland conservation threshold (WCT) for this 81.44-acre property is 50 percent of the net tract area or 40.72 acres. The total woodland conservation requirement, based on the amount of clearing proposed, is 71.16 acres. As currently shown on the plans, the woodland conservation requirement is proposed to be satisfied by 15.17 acres of on-site preservation and 55.99 acres of on-site reforestation. As discussed in the Green Infrastructure section of this memo, meeting the

entire woodland conservation requirement on-site is in keeping with the intent of the *Approved Countywide Green Infrastructure Plan*. Reforestation has appropriately been focused at the headwaters of the streams.

The edge of the reforestation area has been shown to be protected with permanent reforestation signs located a minimum of 50 feet on center. Because the edge of the reforestation area is not proposed to be maintained (mowed) as would be expected with a residential subdivision or commercial site, no reforestation fence or larger caliper planting is required along the reforestation edge located internal to the site. Should a future use for the site be proposed, the tree conservation plan would need to be revised at that time to show adequate protection of the new forest edge.

The plan requires some technical changes to be in conformance with the Woodland Conservation Ordinance. Note 11 under the Type II tree conservation notes needs to be revised to include a statement that planting will occur during the first growing season after completion of each phase. Note 1 under the five-year management notes needs to be revised to indicate that the annual survival checks are to be submitted to M-NCPPC, Environmental Planning Section.

Portions of Preservation Areas 1 and 2 (PA-1 and PA-2) along Aquasco Road appear to be less than 35 feet in width. While this technically meets the requirements because reforestation is proposed abutting the preservation areas, these preservation areas as currently shown will not provide significant benefits for woodland conservation or for screening purposes. The TCPII shows phasing of the berms along Aquasco Road in such a manner that the preservation of these narrow strips is not possible. The plan needs to be revised to show PA-2 and the portion of PA-1 adjacent to Aquasco Road as cleared because there is insufficient space between the proposed berm and the limits of disturbance to provide adequate room for grading and installation of the berm. A note on the plan referring to these areas states: "Woodland retained to be maintained by removing invasive woody and herbaceous plants by mechanical and chemical measures." If, in the field, the areas are mechanically maintained, the areas cannot be counted toward meeting the woodland conservation requirement, but can be counted toward meeting the landscape buffer width requirement only. The trees that may remain cannot be used to reduce the number of required plantings for woodland conservation because the quantity is unknown and their survivability is questionable. To count the entire area as woodland conservation, the area needs to be properly cleared and graded in such a manner to allow for adequate space for the relocation of the berm at a later date.

The area between the property boundary and the relocated berm is to be planted with a combination of larger caliper trees (one to one and one-half-inch) and seedlings at a rate of 25 percent larger caliper and 75 percent seedlings to provide a visual buffer from the historic road. This area can be counted as woodland conservation and should be shown on the plan and in the legend with a different symbol than that used to show the reforestation area proposed as seedlings alone.

The planting proposed to meet the landscape requirement shown on both the TCPII and the landscape plan should be revised from the hedgerow-type of planting that is currently proposed to a more naturalized/random planting pattern. Because these plants will be located in a reforestation area and can be counted toward the reforestation requirement, all plants within the landscape areas should be native. The proposed planting of spreading euonymous should be replaced with a native shrub species that would serve the same purpose.

The reforestation planting schedule shown on the plan should be updated to reflect the 25:75 ratio of larger caliper trees to seedlings proposed to meet the woodland conservation requirement and to include a reference to the credits provided by the proposed landscape planting. The plant species proposed in the reforestation planting schedule table should be revised to include species more tolerant of the harsh conditions of a reclaimed site. At a minimum, yellow poplar should be replaced with a hardier species. Note 2 below the planting schedule needs to be revised to replace “notification to” with “approval of,” so that the full sentence reads “Any substitution made requires written approval of M-NCPPC, Environmental Planning Section.” Notes need to be added with regard to how the soil sterility issue of sand and gravel mining spoils will be addressed.

After all revisions have been made, the qualified professional who prepared the plan needs to sign and date it and update the revision box with a summary of the revisions.

Stormwater Management and Sediment Control

All grading, erosion, and sediment control plans are reviewed by the Prince George’s County Soil Conservation District for conformance with the 1994 *Maryland Standards and Specifications for Soil Erosion and Sediment Control* as well as the 2005 *Prince George’s County Soil Conservation District Soil Erosion and Sediment Control-Pond Safety Manual* (Revised 2007). 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 (not greater than ten percent slopes).

A water quality certification (Code of Maryland Regulations (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 the Maryland Department of the Environment (MDE).

No specific stormwater management information has been submitted to date; however, proposed stormwater management structures, such as the general location of sediment control basins and combination tree protection/silt fence, have been shown on the TCPII. A copy of the technical stormwater management plan is needed for review purposes prior to approval.

Need for Grading Permit

MDE issues mining permits for sand and gravel mines in Maryland. Through this permit, MDE only has control over the actual mining operation itself 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 4 of the Zoning Ordinance will allow 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, as follows:

Section 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.

Because oversight of the proper implementation of the special exception conditions and woodland conservation requirements at the county level is not possible without the issuance of a grading permit, a grading permit should be a requirement of approval of the special exception for mining.

The permit fee for the grading permit should only encompass the elements associated with the special exception approval that are not enforced by MDE. Specifically, the grading permit should be issued for the proposed berms, the paved portion of the entrance road, and the proposed landscaping areas required for conformance with the Landscape Manual. By requiring a county permit for these limited areas, 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.

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

Streams, Floodplains and Wetlands

No regulated floodplain is located on-site; however, a PMA is located on-site, and is comprised of streams, wetlands, and their respective buffers, and has been expanded to include adjacent steep and severe slopes. While no impacts to the PMA are currently proposed, the area should be recorded in the land records in a conservation easement to ensure its permanent protection.

Noise

A noise study prepared by Phoenix Noise and Vibration, LLC dated October 28, 2009, was submitted with the subject application. Revised reports dated February 12, 2010 and March 30, 2010 were also submitted.

Noise impacts are evaluated with respect to how the predicted noise levels compare with state noise standards and regulations (COMAR 26.02.03). The maximum allowable noise levels for receiving residential uses is 65 dBA during the daytime. Because adjacent uses are residential in nature, the maximum allowable noise levels emanating from the property, at the property boundaries, is 65 dBA. It should be noted that the mining operation will have only daytime hours of operation and as such, a “level day and night” average was not used. There are five residential buildings within 300 feet of the property; four of the residential buildings are located directly across MD 381 and the fifth is near the western property corner.

Noise is anticipated 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 source of vehicular-related noise, in relation to mining operations, comes from the dump trucks moving around on the site and entering and hauling material away from the site. Aquasco Road (MD 381) is classified as a collector roadway. This classification of roadway does not generate enough traffic to reach the 65 dBA noise levels for residential uses.

To determine predicted levels of non-point sources of noise, noise measurement surveys were performed by Phoenix Noise and Vibration to determine the noise level produced by the typical operation of surface mining equipment. This information was used in the noise modeling to predict the locations of unmitigated noise levels.

Non-point source/traffic noise was evaluated using the following four methodologies: the average peak-hour level, the average hourly level throughout the operating day, the average 24-hour level (Ldn), and the instantaneous level. The noise levels at different points from the centerline of MD 381 were predicted for different combinations of vehicle types and assumed speeds.

The noise report used a 60 dBA daytime limit for noise emissions, which is more restrictive and conservative than the 65 dBA noise limit. The results of the model indicate that without mitigation, the noise levels in the southern portion of the site will impact the nearby residential properties with levels exceeding 60 dBA. Mitigation in the form of 18-foot-high berms has been proposed to reduce the noise levels at receiving properties to 60 dBA or less. The berms are proposed to be located along the southeastern property boundary, adjacent to Parcel 30, along the frontage of Aquasco Road, and along a wooded buffer with Parcel 9 on the southwestern property boundary. After the initial phase of mining along Aquasco Road has been completed, the location of the berm along the frontage of Aquasco Road is proposed to be moved from 50 feet from the property line to 150 feet from the property line. The secondary location of the proposed berm along Aquasco Road is for the remaining phases of the mining operation (Phase 1B and beyond) and is not included in the noise study because this location will provide mitigation beyond what was modeled in the report.

All proposed mitigation measures result in noise levels of 60 dBA or less on receiving residential properties.

Additional Issues Addressed in the EIR

Additional environmental issues were discussed in the EIR for the subject property including groundwater, air quality, the scenic and historic road viewshed, transportation, and archeology. The scenic and historic viewshed issues have been addressed in the sections above through the provision of berming and landscaping. While transportation and archeological issues were discussed in the EIR, they have been evaluated in separate referral memos provided by the Transportation Planning Section and the Historic Preservation Section, respectively.

The issue of groundwater availability was discussed in the EIR as a concern because there are several existing wells within a quarter-mile radius of the proposed mining operation. The applicant has proposed to address the impacts on private wells should they occur as a result of the mining operation. A condition is proposed to address this situation should it arise.

The EIR notes that all of the air quality standards are currently met in the vicinity of the proposed mine except the ozone standard for which the Metropolitan Washington, D.C. area is in a “non-attainment” status. Adding the predicted increases in air pollutants from the mining operation showed that the operation will not raise pollutant levels above the established standards; however, measures are recommended to reduce the amount of particulate matter that is present during the mining operation. A condition is recommended to address the minimization of particulate matter entering the air and the reduction of sulfur pollution through the use of low sulfur fuels.

- J. **Prince George’s County Landscape Manual Requirements:** The application is subject to Section 4.7 (Buffering Incompatible Uses) of the *Prince George’s County Landscape Manual*. The applicant must revise the site plan to indicate the correct adjacent use to the southeast, where a vacant property is located. The amounts and types of plant material are in conformance with Landscape Manual requirements.

- K. **Sign Regulations:** Numerous signs are shown on the site plan, from the required identification sign to several “Truck Entrance” signs and speed limit reminder signs. All appear to meet the size and locational criteria of Part 12 of the Zoning Ordinance.
- L. **Zone Standards:** The proposed use is in the O-S Zone. The site plan indicates all required setbacks are met and no variances or departures are required.
- M. **Referral Comments:**

Health Department, Division of Environmental Health—The Prince George’s County Health Department, Environmental Engineering Program has reviewed the special exception plan for Jenkins Property (sand and gravel mine) and has the following comments to offer:

1. The Health Department typically receives nuisance complaints concerning dust, noise, and truck traffic associated with sand and gravel operations. The statement of justification appears to adequately address all of these issues.
2. Provide a site plan and list of all the wells located within a quarter-mile radius of the proposed site. The list should include the address of each well and whether it is a shallow or deep well. Further conditions could be imposed if wells are perceived to be impacted by the mining operation.
3. A raze permit must be obtained through the Department of Environmental Resources (DER) prior to the removal of any existing buildings. Any hazardous materials located in any structures on-site must be removed and properly stored or discarded prior to the structures being razed.
4. Numerous old, abandoned vehicles observed on the property must be removed and properly disposed.
5. Any abandoned well(s) found within the confines of the above-referenced property must be backfilled and sealed in accordance with COMAR 26.04.04 by a licensed well driller or witnessed by a representative of the Health Department. The location of the well(s) should be located on the site plan.
6. Any abandoned septic tank found within the confines of the property must be pumped out by a licensed scavenger and either removed or backfilled in place. The location of the septic system should be located on the site plan.
7. The proposed “portable trailer”/scale house will require the utilization of an individual water supply system and an individual sewage disposal system. The applicant must first apply for percolation tests by submitting the enclosed percolation test application along with the \$170.00 fee to this office.

Comment: Environmental Impact Report EIR-4674 analyzed the potential for impacts to surrounding wells and recommends conditions to address them. The raze permit, disposal of junk cars, disposition of wells and septic tanks, and the water and sewer for the scale house will be addressed at the time permits are obtained.

Maryland Department of the Environment (MDE)—There were no comments from this agency, although the approved special exception plan must be submitted to MDE for review and approval prior to the issuance of any county permits.

N. **Required Findings**

Section 27-317(a) of the Zoning Ordinance provides that a special exception may be approved if:

(1) The proposed use and site plan are in harmony with the purposes of this Subtitle.

Comment: The purposes of the Zoning Ordinance, as provided in Section 27-102(a), seek generally to protect and promote the health, safety and welfare of county inhabitants, and promote compatible land use relationships. The operations are required to be conducted in conformance with the applicable state and county standards meant to protect adjacent property owners and the surrounding area from adverse impacts. In addition, the detailed EIR produced conditions of approval which ensure the proposed use will be in harmony with the purposes of the Zoning Ordinance.

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

Comment: The proposed use is subject to the requirements of the *Prince George's County Landscape Manual*. The site plan is in conformance with the required landscaping and bufferyards pursuant to Section 4.7 (Buffering Incompatible Uses); however, the plan needs to be revised to show that the property to the southeast is currently vacant. No departures or waivers are required to implement the special exception.

(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: This application is subject to the recommendations of the 2009 Subregion 6 Master Plan which shows the site as a rural land use consisting of open space and forest. Following the five-year mining period, the site will be reclaimed in accordance with state regulations. Once reclaimed, the site will be retained in open space and as a tree reclamation site, both of which further rather than impair the master plan recommendation.

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

Comment: The applicant is in general compliance with the requirements for a sand and gravel mine. Truck traffic, dust, and noise are the primary concerns associated with the proposed use. The Transportation Planning Section has indicated that from a standpoint of transportation, this special exception raises no health, safety, or welfare issues. The applicant will be required to address dust control measures as part of the air quality permit process from MDE.

A special exception use, not unlike a comprehensive rezoning, is accorded a strong presumption of validity. A special exception use is considered compatible with uses permitted by right within the zone as long as specific criteria are met. Unless unique adverse impacts are identified, the special exception may be approved. The appropriate standard for determining whether the use would create an adverse impact upon surrounding properties is to show that the proposed use, **at the particular location proposed, would have adverse impacts above and beyond those**

inherently associated with the special exception use, regardless of its location within the zone. Although there are clearly negative effects associated with the proposed facility, they are integral to the use and will not result in greater or more unique adverse effects at the proposed location than if the use were located at another site with the same zoning. Therefore, with the recommended conditions and in conjunction with the required state and county permits, it can be reasonably concluded 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.

Comment: The proposed use will not be detrimental to the use or development of adjacent properties or the general neighborhood. The use is located in a sparsely populated section of the county, but does have residential neighbors. Through the use of buffers, screening, berms, and restricting hours of operation, the applicant will minimize impacts upon adjacent properties and the general neighborhood.

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

Comment: The Environmental Planning Section has recommended conditions which will bring the site plan into conformance with Type II Tree Conservation Plan TCP/054/09.

CONCLUSION:

Based on the preceding analysis and findings, staff is recommending that Special Exception Application No. SE-4674 be APPROVED, subject to the following conditions:

1. Prior to approval of the special exception, the Type II tree conservation plan shall be revised as follows:
 - a. Revise Note 11 to include a statement that the proposed planting will occur during the first growing season after completion of each phase of mining.
 - b. Revise Note 1 under the five-year management notes to indicate that the annual survival checks are to be submitted to M-NCPPC, Environmental Planning Section, annually.
 - c. Show PA-2 and the portion of PA-1 adjacent to Aquasco Road as cleared or counted as cleared.
 - d. Show the area between the property boundary and the relocated berm in Phase 1a as planting with a combination of larger caliper trees (one to one-half-inch) and seedlings at a rate of 25 percent larger caliper and 75 percent seedlings.
 - e. Revise the plan and the legend to show the 25:75 larger caliper to seedling ratio combination reforestation area with a separate symbol.
 - f. Revise the planting proposed to meet the landscape requirement shown on both the TCP and the landscape plan from the hedgerow-type of planting that is currently proposed to a more naturalized/random planting pattern.

- g. Revise the landscape planting schedule to show the use of all native species (replace spreading euonymous with a native shrub species).
 - h. Update the reforestation planting schedule as follows:
 - (1) To reflect the 25:75 larger caliper to seedling ratio combination reforestation area proposed to meet the woodland conservation requirement.
 - (2) To include a reference to the credits provided by the proposed landscape planting.
 - (3) To replace the proposed species with hardier species more tolerant of the harsh conditions of a reclaimed site.
 - i. Revise Note 2 below the reforestation planting schedule to read “Any substitution made requires written approval of M-NCPPC, Environmental Planning Section.”
 - j. Add notes on how the soil sterility issue of sand and gravel mining spoils will be addressed.
 - k. Have the plans signed and dated by the qualified professional who prepared them.
2. Prior to signature approval of the special exception, a copy of the stormwater management technical plan shall be submitted.
 3. The applicant shall provide the Environmental Planning Section with copies of all reports submitted to the Maryland Department of the Environment.
 4. Prior to commencement of the mining operation, a grading permit shall be obtained for the installation of the paved entrance, the proposed berms, and the landscaping. A reforestation bond shall be posted prior to grading permit issuance.
 5. The area to be mined shall be reclaimed in accordance with the reclamation plan by filling with acceptable materials as described in the Prince George’s County Code, Subtitle 4, Building Code, Section 4-303. 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 TCPPI shall be revised to provide appropriate protection of the reforestation edge.
 6. Prior to grading permit issuance, a conservation easement shall be recorded in the land records that describe the primary management area (PMA) by bearings and distances. The conservation easement shall contain the entirety of the PMA as shown on the approved natural resource inventory and shall be reviewed by the Environmental Planning Section prior to recordation. The recorded easement document shall include the following text:

“These conservation easements 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.”

7. Noise mitigation shall be provided on-site by implementation of the following:
 - a. Operations on the site are restricted to the hours of 7:00 a.m. to 5:00 p.m. Monday through Saturday, excluding federal holidays and Sundays. Mining activity will be concentrated between 7:30 a.m. and 5:00 p.m. during weekdays and 7:30 a.m. and 3:00 p.m. on Saturdays. Trucks are not permitted to arrive at the site prior to 7:00 a.m.
 - b. The 18-foot-high noise mitigation berms shall be located as shown on the plans submitted to protect nearby residential buildings and properties. The berms are to be relocated, as shown on the plans, upon completion of the initial phase of mining along Aquasco Road, and removed at the end of the mining operation.
 - c. Trucks shall not use compression or “Jake” brakes both on-site and on the roadway.
 - 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 insure quiet operation.
 - f. The volume of backup warning devices shall be minimized while still meeting OSHA (Occupational Safety and Health Administration) standards.
 - g. Acceleration for trucks entering the highway shall be held to a minimum.
8. If the operation of the subject sand and gravel mine impacts the water level in any of the wells within a quarter-mile of the subject mining site, 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.
9. Mitigation of particulate matter emissions shall be accomplished by implementation of the following:
 - a. The haul road shall be maintained with a water truck or other approved dust control methods.
 - b. A truck wash rack shall be established at the site to remove dust from vehicles prior to entering Aquasco Road.
 - c. The site shall have a 15 mph speed limit to reduce dust generation from travel on the unpaved portions of the proposed haul road.
 - d. 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 a period of five years.
 - e. A VGrid S4 screener, or equivalent, shall be used on-site with the use of ultra-low sulfur diesel fuel.
 - f. The dry screening operation shall use a water-based suppression system to control particulate matter when needed.

10. The applicant shall notify the M-NCPPC, Environmental Planning Section, prior to the start of work on each phase of this mining operation and schedule a meeting to address reforestation and woodland conservation issues including: timing for reforestation activities associated with the most recently completed phase, timing for reforestation for the upcoming phase, changes in the species to be planted, decreases in the quantity of trees planted in the event that some natural regeneration has occurred, the need for additional or less site preparation, and other pertinent woodland conservation or reforestation issues.
11. 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. The applicant or their representative shall walk the limits of disturbance with a representative of the M-NCPPC, Environmental Planning Section, prior to the installation of sediment/erosion control measures and tree protective devices.
12. Topsoil shall be stockpiled within the limits of disturbance for use during the reclamation period for each phase.
13. 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.
14. Prior to the issuance of any permits for the site, the applicant shall construct an eastbound left turn lane at the intersection of US 301 and MD 381 subject to SHA approval.
15. The property will be mined at a maximum rate of rate of 500 truck trips per day.
16. Trucks connected to the application are prohibited from using the portion of MD 381 that is south of the subject property.
17. The applicant shall maintain MD 381 (Aquasco Road) north and west of the site entrance free and clear of dirt, gravel, and mud. Street sweepers or water trucks shall be available and utilized on Aquasco Road during all hours of operation of Special Exception SE-4674.
18. Prior to approval of the special exception, the plans shall be revised to indicate that the adjoining property to the southeast is vacant.