



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

Special Exception

SE-4669

Application	General Data	
Project Name: Robin Dale Surface Mining Location: South side of McKendree Road, approximately one mile west of the intersection of McKendree Road and Robert Crain Highway (US 301). Applicant/Address: Chaney Enterprises P.O. Box 548 Waldorf, MD 20604 Property Owner: Robin Dale Land, LLC 9111 Edmonston Road, Suite 407 Greenbelt, MD 20770	Planning Board Hearing Date:	07/14/11
	Staff Report Date:	07/05/11
	Date Accepted:	11/25/09
	Planning Board Action Limit:	N/A
	Plan Acreage:	175.13
	Zone:	R-A
	Gross Floor Area:	N/A
	Lots:	N/A
	Parcels:	1
	Planning Area:	85A
	Tier:	Rural
	Council District:	09
	Election District	11
Municipality:	None	
200-Scale Base Map:	221SE06	

Purpose of Application	Notice Dates	
Special exception request for surface mining of sand and gravel in the R-A Zone.	Informational Mailing	05/14/09
	Acceptance Mailing:	11/23/09
	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, Zoning Section

SUBJECT: **Special Exception Application No. SE-4669**

REQUEST: **Sand and Gravel Operation in the R-A Zone**

RECOMMENDATION: **Approval with conditions**

NOTE:

The Planning Board has scheduled this application to be reviewed on the agenda date of July 14, 2011. If the Planning Board decides to hear the application, it will be placed on a future agenda.

Any person may request the Planning Board to schedule a public hearing. The request may be made in writing prior to the agenda date or in person on the agenda date. All requests must specify the reasons for the public hearing. All parties will be notified of the Planning Board's decision.

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 175.13 acres in size. It comprises a single parcel, Parcel A, Tax Maps 154 and 164. The site is located on the south side of McKendree Road, approximately one mile west of the intersection of McKendree Road and Robert Crain Highway (US 301). The site is partially wooded, although the majority of the site was cleared to accommodate its previous use as a golf course. When the golf course closed, these cleared areas were used for agriculture. There are several abandoned clubhouse buildings and a parking lot towards the center of the site, accessed from McKendree Road to the north via a long driveway. There are several other maintenance structures scattered across the site. The site plan shows all of these structures as to be removed.

- B. **Development Data Summary:**

	EXISTING	PROPOSED
Zone(s)	R-A	R-A
Use(s)	Abandoned golf course Agriculture	Sand and Gravel Mine
Acreage	175.13	175.13
Parcels	1	1
	Tax Maps 154 & 164, Parcel A	Tax Maps 154 & 164, Parcel A

- C. **History:** The property was retained in the Residential-Agricultural (R-A) Zone in the 2009 *Approved Subregion 5 Master Plan and Sectional Map Amendment*, which was approved via District Council Resolution CR-61-2009.
- 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.

Mining of this site to remove valuable natural resources is consistent with policies of both the General Plan and the Subregion 5 Master Plan. Although there is not a redevelopment concept included with the material reviewed for this application, redevelopment in accordance the recommendations of the Subregion 5 Master Plan for residential low-transition area development should be feasible.

- E. **Request:** The applicant is proposing a sand and gravel mining operation. Environmentally sensitive portions of the property including floodplain, tree conservation areas, wetlands, steep slopes, and bufferyards will be preserved. Mining is shown to take place in four phases. All existing structures are shown to be removed and no structures are proposed. No scale and scale house are shown. The material is proposed to be trucked south on McKendree Road to Robert Crain Highway (US 301). From there, the material will be dispersed to job sites and processing plants throughout the region.

The applicant estimates a six-year timeframe for mining. If the operation does extend beyond the statutory maximum five-year approval, a new special exception will be required for the use to continue.

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

North— McKendree Road
East— Robert Crain Highway (US 301)
South— Mattawoman Creek (Charles County boundary)
West— Accokeek Road

The neighborhood is predominantly undeveloped, with wooded parcels, scattered residences, sand and gravel mines, a wet processing plant, and agricultural fields. East of the subject property, towards US 301, are three residential subdivisions.

The site is surrounded by the following uses:

North— Woodlands and undeveloped land in the R-R Zone

Northeast and East— Undeveloped woodland, beyond which is a residential subdivision located more than 1,000 feet to the northeast of the site in the R-E Zone

Southeast, South, West, and Northwest— Sand and gravel operations in the R-A 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 Open Space (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-4669). Air quality and noise impacts were evaluated. According to the Environmental Planning Section memorandum dated June 16, 2011 (Reiser to Lockard), the applicant's air report presented an evaluation of the predicted impacts on air quality by providing ambient (or

background) air quality measurements and adding predicted levels of pollutants that will result from the proposed mining activity. The combined totals were 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 two main concerns with regard to mining operations are particulate matter and carbon monoxide. While lead, nitrogen dioxide, ground-level ozone, and sulfur dioxide were included in the air report evaluation, the amounts created from the mining operation are minimal.

The air report states that all criteria pollutants are predicted to be below the NAAQS with the exception of ozone, which has existing ambient levels above the NAAQS and is currently in nonattainment for the Washington Metropolitan area. The small amount of ozone-causing emissions from the mining operation is not likely to add to the region's nonattainment status. The EIR recommends conditions addressing 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 2 tree conservation plan (TCP2) 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 R-A 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 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 six 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: The applicant has submitted the required traffic study. It proposes a maximum of 200 loads leaving the site daily, heading south on McKendree Road to its intersection with Robert Crain Highway (US 301).

An analysis was conducted by Transportation Planning staff and is presented in EIR-4669. The findings and recommendations outlined below are based upon a review of these materials and analyses conducted by Transportation Planning staff, in consideration of the current plan of access to the site and changes that have occurred since the application was originally reviewed. All analyses are consistent with the “Guidelines for the Analysis of the Traffic Impact of Development Proposals.” This memorandum supersedes the original memorandum dated June 25, 2010.

The current application states that the haul route proceeds from the site onto an existing off-site haul road to McKendree Road. From that point, the haul route continues south along McKendree Road to the US 301/Branch Avenue (MD 5) intersection. At that point, the haul route turns south along US 301/MD 5 to access a wash plant in Charles County.

The subject property is located within the Developing Tier, as defined in the *Prince George’s County Approved General Plan*. As such, the subject property is evaluated according to the following standards:

Links and signalized intersections: Level-of-service (LOS) D, with signalized intersections operating at a critical lane volume (CLV) of 1,450 or better. Mitigation, as defined by Section 24-124(a)(6) of the Subdivision Regulations, is permitted at signalized intersections within any tier subject to meeting the geographical criteria in the guidelines.

Unsignalized intersections: *The Highway Capacity Manual* procedure for unsignalized intersections is not a true test of adequacy, but rather an indicator that further operational studies need to be conducted. Vehicle delay in any movement exceeding 50.0 seconds is deemed to be an unacceptable operating condition at unsignalized intersections. In response to such a finding, the Planning Board has generally recommended that the applicant provide a traffic signal warrant study and install the signal (or other less costly warranted traffic controls) if deemed warranted by the appropriate operating agency.

Existing Conditions

The following roadway facilities were identified in the traffic study as the network on which the proposed development would have the greatest impact, in consideration of the requirements of Section 27-410 of the Zoning Ordinance. For the purposes of this review, the following intersections are analyzed using information provided in the submitted study:

- McKendree Road and site access—intersection, unsignalized
- McKendree Road between site access and US 301/MD—link
- US 301/MD 5 and McKendree Road—intersection, signalized

Regional access to the subject site is provided by US 301/MD 5 and local access is provided by McKendree Road. The site is served by an existing haul road. This haul road connects to McKendree Road in the 16300 block of McKendree Road. The haul road serves an existing surface mining site which is a valid use, but is not being mined at this time. While the haul road is paved at a minimum width of 22 feet at least 200 feet back from McKendree Road, the pavement is in poor condition and the entrance to the haul road is currently gated and chained closed to prevent its usage.

Robert Crain Highway (US 301)/MD 5 is a north-south, six- to eight-lane, divided roadway with a posted speed limit of 55 miles per hour. Both numbered roadways extend south into Charles County. To the north, the facilities diverge, with US 301 extending northeast to John Hanson Highway (US 50) in Bowie and Branch Avenue (MD 5), extending northwest to the District of Columbia. The intersection of US 301/MD 5 with McKendree Road is signalized.

McKendree Road is a two-lane roadway serving the site. It is oriented from northwest to southeast between Accokeek Road (MD 373) to US 301/MD 5. It is currently two lanes over its entire length and the section from the subject site southeast to US 301/MD 5 has a variable pavement width. The pavement width is a minimum of 24 feet from the 16000 block of McKendree Road to US 301/MD 5. While the portion of McKendree Road north and west of the 16000 block is a substandard 19 feet in width within a limited right-of-way, this portion is beyond the haul route for the use. The speed limit over the entire link of McKendree Road is 25 miles per hour.

The analysis of any transportation facility begins with the data collection process. At the locations counted, weekday turning-movement counts were collected in January 2009 (the date of one of the counts was mislabeled as “2008;” this error has been confirmed). The counts were made between the hours of 6:30 a.m. and 9:30 a.m., and 4:00 p.m. and 7:00 p.m. Pursuant to the guidelines, traffic data are collected and recorded in 15-minute increments within both 3-hour periods. The peak hour total is determined by adding the four consecutive 15-minute totals that yield the highest number. The analyses showed that the morning peak hour occurs between 7:30 a.m. and 8:30 a.m. along McKendree Road, and between 6:30 a.m. and 7:30 a.m. along US 301/MD 5. Similarly, the afternoon peak hour occurs between 5:00 p.m. and 6:00 p.m. along McKendree Road, and between 4:15 p.m. and 5:15 p.m. along US 301/MD 5. It is noted that the percentage of trucks in the traffic flow was not explicitly addressed in the study.

Existing traffic conditions in the area of the subject property are summarized in the following table:

SUMMARY OF CAPACITY ANALYSES RESULTS — EXISTING CONDITION		
Intersection	LOS & CLV (or Delay*)	
	AM	PM
McKendree Road and site access*	Future	Future
US 301/MD 5 and McKendree Road	C/1,228	F/1,603
Roadway Link	V/C Ratio	
	AM	PM
McKendree Road from site access to US 301/MD 5**	0.13**	0.15**
<p>*Unsignalized intersections are analyzed using <i>The Highway Capacity Manual</i> (Transportation Research Board) method in accordance with the “Guidelines for the Analysis of the Traffic Impact of Development Applications.” The results show the level-of-service and the maximum delay in any movement measured in seconds per vehicle. A level-of-service E corresponds to a maximum delay of 50 seconds per vehicle, which is the maximum level of delay deemed acceptable per the guidelines.</p> <p>**The link analysis procedure from <i>The Highway Capacity Manual</i> (Transportation Research Board) is applied, and the resulting volume-to-capacity (V/C) ratio is indicated. A maximum V/C of 0.80 is acceptable in accordance with the guidelines.</p>		

The traffic study included a summary of crash data along McKendree Road between the subject site and US 301/MD 5 for the years 2005, 2006, and 2007. Over that three-year period, 16 accidents were reported along this section of roadway. Based on average daily traffic volumes along McKendree Road, this degree of accident activity results in an accident rate of 4.40 per one million vehicle miles.

Evaluation of Projected Impacts

A review of the Department of Public Works and Transportation (DPW&T) average daily traffic count list indicates an annual growth in traffic along McKendree Road of 5.6 percent. Similarly, a review of the Maryland State Highway Administration (SHA) traffic database has revealed an annual decline in traffic along US 301/MD 5 of 0.4 percent. These trends in traffic are not expected to continue into the future. A lesser rate of growth is anticipated in the future along McKendree Road because of the local nature of the roadway. In the long term, traffic along US 301/MD 5 is anticipated to grow 1.3 percent annually. These rates of traffic growth are not related to the subject application and would be assumed to occur regardless of the status of the subject application.

McKendree Road is designated as a two-lane primary roadway (P-504) within a 60-foot right-of-way between Accokeek Road (MD 373) and Lavender Dream Lane. The section of McKendree Road between Lavender Dream Lane and US 301/MD 5 is planned as a four-lane major collector (MC-502) within a 100-foot right-of-way. Robert Crain Highway (US 301)/MD 5 is designated as an eight-lane freeway (F-10). These recommendations are all contained in the *Approved Subregion 5 Master Plan and Sectional Map Amendment*.

The July 2009 traffic study submitted with the application included a review of all approved development within the impact area as defined at the traffic analysis scoping meeting. The traffic consultant, in consultation with staff, identified 13 background developments whose impact could affect the transportation network within the study area. Those identified developments include the following:

- Brandywine Village L-A-C: 214,200 square feet retail
- 301 Commercial Center: 91,000 square feet retail
- FMC Properties: 31,000 square feet light industrial
- Chaddsford: 438 mixed residences
- McKendree Road Property: 8 detached residences
- Brandywine Crossing: 311,289 square feet retail and 47,045 square feet industrial park
- Timber Village: 18 detached residences
- Catherine's Christian Learning Center: 70 student day care
- Young World Family Day Care: 56 student day care
- Burch Hill Acres: 1 detached residence
- Waldorf Crossing: 752 mixed residences, 165,000 square feet office, and 230,000 square feet retail

Two additional developments should have been included in the traffic study, given that they are within the overall study area. These developments are:

- Lakeview at Brandywine: 258 detached residences
- Stephens Crossing: 125,750 square feet light industrial

Since the traffic study was completed, two additional developments were approved within the study area, thereby necessitating their inclusion in the staff analysis. These developments are:

- Villages of Timothy Branch: 1,200 mixed residences and 305,000 square feet commercial
- Curtis Farm: 381,000 square feet mixed retail/office

Also, Special Exception SE-4479 is an approved use of an adjacent site for surface mining. Special Exception SE-4479 is approved to use the haul road proposed for use by the subject application. Therefore, 150 daily truckloads are assumed to be part of the background scenario and will be assigned to the approved haul route as well.

Collectively, the background developments included in the study plus the four additional developments could generate 3,461 AM peak hour trips (1,592 inbound, 1,879 outbound), and 7,510 PM peak hour trips (3,743 inbound, 3,767 outbound). The 2009 traffic study offered no assumption regarding the timing for the start of operations for this use, and the analysis has not included any factor for traffic growth between 2009 and the start of operations. A two-year start-up is typical and, for that reason, it is assumed that the

proposed mining operation would become operational by 2011, and that year is utilized as the “design” year for the purpose of a background analysis. To determine the impact on the transportation network in the future, two years’ worth of growth is applied to the 2009 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 “Guidelines for the Analysis of the Traffic Impact of Development Proposals.” Background traffic conditions in the area of the subject property are summarized in the following table. The future contribution of the subject site to traffic conditions without mining could be significant given the zoning (R-A) and the size of the site (over 175 acres). Nonetheless, were the subject site to be otherwise developed, the impacts of the development would have to be tested for transportation adequacy as a part of a subdivision application.

PROJECTED FUTURE CONDITION — WITHOUT THE SUBJECT APPLICATION		
Intersection	LOS & CLV (or Delay*)	
	AM	PM
McKendree Road and site access*	A/9.7*	B/11.5*
US 301/MD 5 and McKendree Road	E/1,520	F/2,439
Roadway Link	V/C Ratio	
	AM	PM
McKendree Road from site access to US 301/MD 5**	0.13**	0.18**
<p>*Unsignalized intersections are analyzed using <i>The Highway Capacity Manual</i> (Transportation Research Board) method in accordance with the “Guidelines for the Analysis of the Traffic Impact of Development Applications.” The results show the level-of-service and the maximum delay in any movement measured in seconds per vehicle. A level-of-service E corresponds to a maximum delay of 50 seconds per vehicle, which is the maximum level of delay deemed acceptable per the Guidelines.</p> <p>**The link analysis procedure from <i>The Highway Capacity Manual</i> (Transportation Research Board) is applied, and the resulting volume-to-capacity (V/C) ratio is indicated. A maximum V/C of 0.80 is acceptable in accordance with the guidelines.</p>		

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

- The property will be mined at a rate of 200 truckloads per day.
- The operations will be limited to the hours of 6:00 a.m. to 5:00 p.m. during weekdays.

In addition to the on-site mining activity, the application states that the following haul routes would be utilized:

- All of the truck traffic generated by this site will utilize McKendree Road between the site and US 301/MD 5, and from that point would proceed to the south to continue to the wash plant or the point of use.

Total projected traffic volumes were obtained by combining the factored site-generated truck trips with the projected background traffic volumes for 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 the following table:

PROJECTED FUTURE CONDITION — WITH THE SUBJECT APPLICATION		
Intersection	LOS & CLV (or Delay*)	
	AM	PM
McKendree Road and site access*	B/12.6*	B/12.3*
US 301/MD 5 and McKendree Road	E/1,538	F/2,457
Roadway Link	V/C Ratio	
	AM	PM
McKendree Road from site access to US 301/MD 5**	0.18**	0.19**
<p>*Unsignalized intersections are analyzed using <i>The Highway Capacity Manual</i> (Transportation Research Board) method in accordance with the “Guidelines for the Analysis of the Traffic Impact of Development Applications.” The results show the level-of-service and the maximum delay in any movement measured in seconds per vehicle. A level-of-service E corresponds to a maximum delay of 50 seconds per vehicle, which is the maximum level of delay deemed acceptable per the guidelines.</p> <p>**The link analysis procedure from <i>The Highway Capacity Manual</i> (Transportation Research Board) is applied, and the resulting volume-to-capacity (V/C) ratio is indicated. A maximum V/C of 0.80 is acceptable in accordance with the guidelines.</p>		

This analysis indicates the following:

- The unsignalized intersection at McKendree Road and site access, along with the link of McKendree Road between the site and US 301/MD 5, operate acceptably now and in the future regardless of the mining activity within the subject site in accordance with the standards identified by the Planning Board within the guidelines.
- The signalized intersection at US 301/MD 5 and McKendree Road is projected to operate unacceptably now and in the future regardless of this use. The background traffic and the growth in through traffic are sufficient to result in poor levels of service during both peak hours; both CLVs (1,538 AM; 2,457 PM) well exceed the maximum CLV standard of 1,450. All developments in the area of the US 301/MD 5/McKendree intersection are contributing to a road club which would assist in funding major improvements over the long term in the area of that intersection. Because the surface mining use at the site is considered to be a temporary use, and because the findings required for special exception approval are not strict findings of adequacy, the Planning Board and the District Council have not, when reviewing similar special exception uses in this area with similar issues in the study area, deemed it necessary to impose conditions requiring either physical improvements or contributions to the road club.

The following significant issues were raised by agencies reviewing the traffic impact study for this site:

- DPW&T has indicated that specific improvements at the site access onto McKendree Road will be needed. This comment was made prior to the access being moved to the location shown on the current plan. Given that a left-turn bypass lane exists on northbound McKendree Road at the currently proposed

haul road entrance, no roadway improvements would be needed at this location to serve this use. The signage appeared to be deficient; however, a “No Left Turn” sign for trucks leaving the site is needed.

- DPW&T indicated that the existing access must be widened and overlaid to a width of 30 feet for a distance of 200 feet. This comment was made prior to the access being moved to the location shown on the current plan. It is noted that the pavement on the haul road proposed for use, while nominally meeting the standard set in Subtitle 27 of the Prince George’s County Code, is in poor condition and the existing pavement should be overlaid and marked as appropriate.
- DPW&T stated that McKendree Road is approximately 19 feet in width, and recommended that McKendree Road, between the site access and Lavender Dream Lane, be widened to a pavement width of 26 feet to safely accommodate truck traffic. This requirement was based on the initial submittal that showed the haul road for the site in the 15700 block of McKendree Road. Since that time, the proposal has been modified to utilize a haul road that connects to McKendree Road south and east of Lavender Dream Lane. This portion of McKendree Road has a minimum pavement width of 24 feet; this is the minimum pavement width prescribed by the law. Therefore, this comment is no longer applicable.
- SHA has requested an operational and delay analysis at the intersection of US 301/MD 5 and McKendree Road as a condition of this use. The applicant has specifically indicated that the wash plant to be employed for resources mined at this site is to the south, meaning that virtually all trucks leaving the site will turn right onto US 301/MD 5, and virtually all trucks entering the site will approach from the south and turn left onto McKendree Road. It is noted that there is an acceleration lane for traffic turning right onto US 301/MD 5 from McKendree Road. Furthermore, vehicles turning left onto McKendree Road have a signalized left turn movement. Given that the use is temporary, and in consideration of the improvements that exist at that intersection, the additional study would be of limited benefit. Because the subject application will be reviewed and approved by the Maryland Department of the Environment (MDE), SHA will be able to address this issue through the review of state permits.

Conclusion

The Transportation Planning Section finds that the proposed surface mining use would meet the requirements of Subtitle 27 for the approval of a special exception from the standpoint of transportation. Numerous conditions of approval are recommended and have been added to the recommendation at the end of 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.**

Comment: Two access points exist for the site. Access from the Robin Dale site onto McKendree Road is limited to an approximately 2,000-foot-long and 22-foot-wide

entrance road that is included as part of the subject site (Parcel A); however, the haul route is proposed via a connection to an existing haul road on the property to the south. This haul road was approved under Special Exceptions SE-2970 and SE-4479. The entrance to the subject property (Parcel A) is located approximately 4,000 feet north of the existing haul road entrance and is not proposed to be used to haul sand and gravel.

The sight distance along McKendree Road at the location where the existing haul road enters McKendree Road is greater than at the location of the subject property's own access point. A greater sight distance promotes greater safety for trucks entering traffic along McKendree Road, making the existing haul road a more desirable location with regard to safety.

Because the use of an existing haul road is being proposed, pavement of the haul road at its connection to the property boundary is not practical. The haul road should be paved at its entrance onto a county road. The existing haul road entrance may require minor improvements for the required distance of 200 feet from McKendree Road. 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-4669.

- (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 R-A 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 R-A 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-4669). According to the Environmental Planning

Section memorandum dated June 16, 2011 (Reiser to Lockard), EIR-4669 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 a 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 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 report for the District Council's consideration. The inventory identifies one active mine in direct proximity to the subject property to the west and south, and there are other mining sites within the planning area that contribute truck trips to US 301.

- H. **Additional requirements for a surface mining facility:** Section 27-445.02 of the Zoning Ordinance 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 obtain all necessary permits from the State of Maryland for the operation of a surface mine, subsequent to the approval of the special exception.

The applicant intends to operate the surface mine in accordance with all permits.

- (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: Staff is recommending conditions which address truck speed, monitoring, maintenance and ownership. These conditions of approval will ensure this finding is met.

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

Comment: Condition 13 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. These conditions of approval will ensure this finding is met.

- (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 the 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.**

Comment: The subject property is not within a Chesapeake Bay Critical Area. 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
6. Any other environmental factors relating to the health, safety, and welfare of the residents of the affected area

The Environmental Planning Section prepared an EIR for this application (EIR-4669). The Environmental Planning Section provided the following comments and recommended conditions in their June 16, 2011 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-004-09-02, 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

An approved Natural Resources Inventory, NRI-004-09-02, was submitted with the application. There is a primary management area (PMA) comprised of streams, stream buffers, wetlands, wetland buffers, and 100-year floodplain.

Portions of the floodplain shown on the plan are from Floodplain Study FPS-890162, prepared by Loiederman Soltesz Associates, Inc., approved by Prince George's County Department of Environmental Resources (DER) on December 7, 1989. However, the referenced floodplain study covers only the westernmost tributary on-site. Two other conveyances are located on-site; one is labeled as a ditch and is located centrally, and one is located along the eastern property boundary and is labeled as an intermittent stream along the southern portion only. The northern portion is a ditch. Both of the additional conveyances have a drainage area greater than 50 acres. A Floodplain Study (FPS-200727) was prepared for the eastern-most conveyance for the Dobson Horse Farm by Loiederman Soltesz Associates, Inc. on October 17, 2007; however, a request for delineation approval by DPW&T was never pursued. A floodplain study for the ditch located centrally on-site has never been requested by the owner. Floodplain area has been identified in an updated floodplain study prepared by the DER (FPS-890162) dated September 1, 2010. A note has been placed on the NRI that states that the floodplain information for the central and eastern conveyances has only been provided for woodland conservation purposes because impacts to the 100-year floodplain will not be evaluated at the local level.

The forest stand delineation (FSD) indicates the presence of two forest stands totaling 37.60 acres and the site contains 41 specimen trees.

Stand 1 (36.03 acres) is characterized as a mature mixed-hardwood forest dominated by white and red oaks as well as Virginia pine. The understory layer is generally dominated by American holly and American beech. This stand has an average diameter of 10 to 18 inches. Stand 1 contains sensitive environmental features including steep slopes, erodible soils, regulated streams, and wetlands, and has been designated as high retention priority. The forest structure analysis indicates that Stand 1 is a high priority for both preservation and restoration.

Stand 2 (1.57 acres) is characterized as an early successional mixed-hardwood forest dominated by callery pear and black cherry. The understory layer is generally lacking. This stand has an average diameter of two to six inches. The forest structure analysis indicates that Stand 2 is a medium priority for both preservation and restoration. The presence of the invasive callery pear reduces this stand's desirability for preservation.

The Type 2 tree conservation plan (TCP2) and the special exception mining plan are in general conformance with the approved 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 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 (TCP2-061-09) was submitted.

The woodland conservation threshold (WCT) for this 175.13-acre, R-A-zoned property is 50 percent of the net tract area or 77.36 acres; however, because this site has less existing woodland than the WCT, the total woodland conservation requirement is based on a calculation using the acreage of existing woodland, not the WCT. The total woodland conservation requirement based on the amount of existing woodlands and the amount of clearing proposed is 59.94 acres, which is proposed to be satisfied with 8.59 acres of on-site preservation and 51.35 acres of on-site reforestation.

The mining plan and TCP2 show the proposed phasing. A phased worksheet has been shown to reflect the phases of mining. One minor revision is needed on the worksheet. Currently, there are no areas shown in the row labeled as Cumulative Woodland Conservation Required. Because all calculations in the worksheet appear to be correct based on what is shown on the plan, it appears that this row being blank was an oversight. The row for Cumulative Woodland Conservation Required needs to be filled-in.

The floodplain shown on the plan is consistent with the floodplain shown on the approved -02 revision to the NRI; however, all notes located on the plans that reference a floodplain study should be revised to reference the floodplain study number (approved or unapproved) and the name of the individual who prepared the study should be removed from the note. Specifically, the note that appears on several sheets of the plan set needs to be revised to reference an update to FPS-890162 prepared by DER on September 1, 2010. The name of the individual who prepared the study needs to be removed from the note.

The plan currently shows woodland preservation within the floodplain being counted toward the woodland conservation requirements. Conservation of woodland within the floodplain is a priority; however, because floodplain is not included in the net tract area for calculation purposes, it cannot be counted as preservation for woodland conservation calculation purposes. The TCP needs to be revised to remove the preservation symbol and labels from all areas of woodland within the floodplain that are not proposed to be cleared. Additionally, there are areas shown outside the limits of disturbance (LOD) that are hatched and labeled as being cleared. If these areas are proposed to be cleared, then the LOD needs to be expanded to show these areas as cleared, otherwise these areas should be revised to be shown with an appropriate method of woodland conservation (preserved, preserved but not counted toward woodland conservation requirements, or no woodland conservation if located within the floodplain). All woodland

conservation labels, tables, summary charts, and the worksheet should be updated to reflect all changes made to the proposed woodland conservation areas on the plan.

The mining site, landscape, and TCP plans have been labeled consecutively as Sheets 1 through 13; the mining site plan comprises Sheets 1 through 5, the landscape plan comprises Sheets 6 through 9, and the TCP comprises Sheets 10 through 13. Because each set of plans needs to stand alone for expediting of signature approvals, each set of plans needs to show the site in its entirety as well as all proposed off-site improvements. The landscape and TCP sets of plans need to be revised to include a sheet similar to Sheet 4 of mining site plan, to show the off-site haul road in its entirety.

The LOD for the proposed outfalls appears to have been shown for all proposed stormwater structures; however, the structures themselves need to be shown on the plan. The plan needs to be revised to show the location of all proposed pipes and rip-rap.

The woodland preservation areas need to be protected during the mining activity by temporary tree protection fence. The plans show that a majority of the woodland preservation areas have proposed tree protection devices; however, several vulnerable woodland edges are not shown to be protected on the plans as submitted. These include areas where the LOD is shown close to the property line and the off-site woodland edge. Because the edge of the reforestation area is not currently 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. Should a future use for the site be proposed, the TCP would need to be revised at that time to demonstrate adequate protection of the newly created forest edge.

A proposed treeline has been shown along the edge of the proposed reforestation areas. This proposed treeline is difficult to differentiate from the existing treeline and needs to be removed from the TCP. The standard hatching shown on the plan for the proposed reforestation is a sufficient representation of the proposed woodland edge. The symbol for the proposed reforestation signs is very small and difficult to see on the plan. The reforestation sign needs to be revised to be larger for plan clarity.

Because this plan is phased, all woodland conservation (clearing, preservation, reforestation, etc.) needs to be labeled and summarized for each phase. A table similar to Table A-6B of the Technical Manual should be provided on the plan. This table was established to summarize lot-by-lot woodland conservation statistics; however, with slight modification, it can be used to summarize the woodland conservation statistics for a phased project. The woodland conservation worksheet will also need to be revised to address any changes made to the woodland conservation proposed on the plan and to ensure that the areas used for calculation purposes match the labels on the plan and the summary table.

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 made.

Additionally, it should be noted that woodland conservation areas are required to be protected via a conservation easement per Section 25-122(d)(B) of the Woodland Conservation Ordinance. A condition is recommended in comment 8 below to address the recordation of a conservation easement for areas of woodland conservation.

Variance for Specimen Tree Removal

Effective October 1, 2009, the State Forest Conservation Act was amended to include a requirement for a variance if a specimen, champion, or historic tree is proposed to be removed. This state requirement was incorporated in the adopted County Code effective September 1, 2010.

If after careful consideration has been given to the preservation of the specimen trees there remains a need to remove any of the specimen trees, a variance from Section 25-122(b)(1)(G) is required. Applicants can request a variance from the provisions of Division 2 of Subtitle 25 (Woodland and Wildlife Habitat Conservation Ordinance) provided all of the required findings in Section 25-119(d) can be met and the request is not less stringent than the requirements of the applicable provisions of Code of Maryland Regulations (COMAR). An application for a variance must be accompanied by a letter of justification stating the reasons for the request and how the request meets each of the required findings.

A Subtitle 25 Variance Application, a statement of justification in support of a variance, and a tree removal plan were stamped as received by the Environmental Planning Section on March 28, 2011.

The specimen tree table on the tree removal plan and the TCP2 show the proposed removal of 23 of the 41 specimen trees that exist on-site (Specimen Trees 4–9, 11, 12, 17–29, 39, and 40). The limits of disturbance (LOD) on the plans also show that these trees are to be removed. The trees to be preserved (Specimen Trees 1–3, 10, 13–16, 30–38, and 41) are located either in the PMA or along the perimeter of the site.

Section 25-119(d) of the Woodland Conservation Ordinance contains six required findings [text in bold] to be made before a variance can be granted. The letter of justification submitted seeks to address the required findings for the 23 specimen trees as a group. Staff agrees with the approach to the analysis because they are clustered together centrally on the site and have similar concerns regarding their location, species, and condition.

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

The statement of justification outlines the fact that significant sand and gravel deposits are located on this site. While there are other properties containing sand and gravel deposits within Prince George's County, not every property contains such deposits. The subject property is also fairly large in size (175.13 acres) lending to the economic viability of mineral extraction on-site. These are special conditions peculiar to the property.

The statement of justification also addresses the background and goals listed in the recently approved Subregion 5 Master Plan which support the extraction of sand and gravel. Retaining the trees located centrally on this site, where the mineral extraction is proposed, would cause an unwarranted hardship because the mining area would have to be reduced significantly in order to ensure that the trees are protected sufficiently to survive changes in the water table that will result from mining.

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

Preventing the mining of sand and gravel on the Robin Dale site within the area of the specimen trees would prevent the applicant from enjoying rights commonly enjoyed by other property

owners with sites containing sand and gravel deposits that may not have specimen trees on-site.

If other properties containing sand and gravel deposits are proposed to be mined and encounter trees in a similar condition and in a similar location, the same considerations would be provided during the review of the required variance application.

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

The statement of justification addresses this required finding by stating that the extraction of sand and gravel is a priority for the county and that the applicant is not seeking a special privilege that would be denied to others.

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

The existing conditions or circumstances are not the result of actions by the applicant because the applicant has taken no action on the subject property to date.

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

The request to remove the trees does not arise from any condition on a neighboring property.

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

The statement of justification points out that granting a variance to remove the specimen trees will not adversely affect water quality based on the findings of a hydrogeologic impact report prepared on behalf of the applicant by Advanced Land and Water, Inc.

The application is also subject to the erosion and sediment control requirements of the Maryland Department of the Environment (MDE) and the Prince George's County Soil Conservation District for water quality purposes.

The trees to be preserved (Specimen Trees 1–3, 10, 13–16, 30–38, and 41) are located either in the PMA or along the perimeter of the site and will provide a water quality benefit, with regard to providing canopy cover to slow down and filter falling rain, providing areas for water infiltration in the root zone, preventing soil erosion, and by providing a variety of other eco-services such as reducing the ambient temperature of stormwater run-off. Specimen trees excel at providing these benefits because of their extensive canopy coverage.

Based on the Environmental Planning Section's review, the required findings of Section 25-119(d) have been properly addressed for the removal of Specimen Trees 4–9, 11, 12, 17–29, 39, and 40 based on the information provided.

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 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 (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, proposed protective devices, including the general location of sediment control basins and silt fence, have been shown on the TCP2. 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 LOD and sediment erosion control devices shown on the TCP2 are in general conformance with the technical sediment erosion control plan.

Need for Grading Permit

MDE issues a mining permit 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 County Code will allow county inspectors to inspect and enforce 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 paved portion of the entrance road. 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 proper implementation of the special exception conditions and woodland conservation requirements.

The issuance of a county grading permit will also allow 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.

Streams, Floodplains, and Wetlands

The property is located in the drainage area of Mattawoman Creek within the Lower Potomac watershed. The site is characterized by a perennial stream located both on and off the northwestern property boundary, an unregulated ditch along the northeastern portion of the site that drains to the south into a regulated intermittent stream beginning on the southeastern portion of the site, and an unregulated ditch located centrally on the site draining from north to south. Several wetlands connected to the on-site streams exist on-site as well as one isolated wetland. Three existing irrigation ponds are also located on-site and are not regulated. Areas of 100-year floodplain are located on-site.

A 100-year floodplain is an area of land where there is a 1 in 100 chance, or 1 percent chance, that the area will be flooded in any given year.

A floodplain, as defined in the Floodplain Ordinance (part of the Building Code, Subtitle 4, Division 2) is:

- (i) a relatively flat or low land area adjoining a river, stream or water course which is subject to partial or complete inundation;**
- (ii) an area subject to the unusual and rapid accumulation or runoff of surface waters from any source; or**
- (iii) an area subject to tidal surges or extreme tides.**

The Floodplain Ordinance further defines a floodplain in Section 4-263(c)(4) as a water course having a drainage area of 50 acres or more. Specifically, the ordinance states “For all proposals associated with a watercourse having drainage area of 50 acres or more, the Department or its designee shall determine the 100 year flood elevation using floodplain models and the developer shall delineate it on the proposed plan.”

Portions of the floodplain shown on the plan are from Floodplain Study FPS-890162, prepared by Loiederman Soltesz Associates, Inc., which was approved by the Prince George’s County Department of Environmental Resources (DER) on December 7, 1989. However, the referenced floodplain study covers only the westernmost tributary on-site. Two other conveyances are located on-site; one is labeled as a ditch and is located centrally, and one is located along the eastern property boundary and is labeled as an intermittent stream along the southern portion only. The northern portion is a ditch.

All three conveyances have a drainage area greater than 50 acres. A Floodplain Study (FPS-200727) was prepared for the eastern-most conveyance for the Dobson Horse Farm by Loiederman Soltesz Associates, Inc. on October 17, 2007; however, a request for delineation approval by DPW&T was never pursued. A floodplain study for the ditch located centrally on-site has never been requested by the owner. Floodplain area has been identified in an updated floodplain study prepared by the DER (FPS-890162) dated September 1, 2010. A note has been placed on the NRI that states that the floodplain information for the central and eastern conveyances has only been provided for woodland conservation purposes because impacts to the 100-year floodplain will not be evaluated at the local level.

Comment: No additional floodplain information is needed for this special exception application.

Impacts to Regulated Environmental Features

This site contains regulated environmental features that are required to be preserved and/or restored to the fullest extent possible under Section 27-317(a)(7) of the Zoning Ordinance. The on-site regulated environmental features include streams and their associated 75-foot-wide buffers, wetlands and their associated 25-foot-wide buffers, and 100-year floodplain. The site also contains an isolated wetland along the northeastern property line.

Section 27-296(c)(1)(L) of the Zoning Ordinance requires that a letter of justification stating how the proposed design ensures the preservation and/or restoration of the regulated environmental features to the fullest extent possible be submitted. A letter of justification was submitted and reviewed as part of this application.

Impacts to the regulated environmental features should be limited to those that are necessary for development of the property. Necessary impacts are those that are directly attributable to infrastructure required for the reasonable use and orderly and efficient development of the subject property or are those that are required by the 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 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 regulated environmental features. Stormwater management outfalls may also be considered necessary impacts if the site has been designed to place the outfall at a point of least impact. The types of impacts that can be avoided include those for site grading, building placement, parking, stormwater management 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.

A letter of justification for the proposed impacts was stamped as received by the Environmental Planning Section on March 31, 2011. The special exception proposes impacts to the PMA in order to install two stormwater management outfalls. These impacts total 1,980 square feet and are considered necessary to the orderly development of the subject property. These impacts cannot be avoided because they are required by other provisions of the county and state codes. The plan shows preservation of the remaining areas of PMA and the isolated wetland.

Staff supports the request for installation of two stormwater management outfalls. The outfalls have been located in areas free of woodland, wetlands, and wetland buffers, and have been designed to outfall at the lowest possible elevations to reduce the potential energy of overland flows.

Noise

A noise study dated May 12, 2009, prepared by Scantek, Inc., was stamped as received by the Environmental Planning Section on November 30, 2009. A revised noise study dated June 4, 2010, prepared by Scantek, Inc., was stamped as received on June 16, 2010. A second revised noise study dated October 22, 2010, prepared by Scantek, Inc., was stamped as received on November 8, 2010. A final revised noise study dated April 22, 2011, prepared by Scantek, Inc., was stamped as received on April 26, 2011 and a supplemental noise report dated May 4, 2011 was stamped as received on May 4, 2011. Revisions were required to address missing or incorrect information from the initial submittal.

The Robin Dale site is surrounded by residentially-zoned properties and, based on state standards, the noise levels are required to be 65 dBA or less at the shared property boundary.

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 levels 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 noise environment in the project area will be 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 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. McKendree Road is classified as a primary roadway. This classification of roadway does not generate enough traffic to reach the 65 dBA noise levels for residential uses.

The noise study used noise levels measured for the equipment proposed to operate on-site to predict the point source noise associated with the proposed mining operation for two different scenarios, with sound abatement in the form of berms and without sound abatement (no berms). A third evaluation was included in the report for the evaluation of non-point noise generated by dump truck trips proposed along the off-site haul road. The third evaluation was referred to as a "pass-by" analysis, which applies regardless of whether or not berms are provided on-site.

The results of the report indicate that, for the first scenario where berms are proposed, the berms shown on the mining, landscape, and tree conservation plans are needed to mitigate noise levels to the state standard of 65 dBA at all of the Robin Dale property boundaries. The berms shown on the plans will provide mitigation for all portions of the property boundary with the exception of the western boundary abutting Parcels 2 and 27. The noise levels predicted for this portion of the property boundary are estimated to be between 66 and 78 dBA (just over the 65 dBA standard). Parcels 2 and 27 are currently owned by mining companies and are approved as existing mining operations under Special Exceptions SE-4218 and SE-4479. The predicted noise levels at the property boundary abutting Parcels 2 and 27 are considered to be at acceptable levels and do not require mitigation based on the unlikelihood that Parcels 2 and 27 will move forward with residential development over the five-year timeframe of the Robin Dale special exception approval, because they are active mining operations, combined with predicted noise levels only slightly above the state standards on this portion of the site. Parcels 14 and 41, along the northern property boundary adjacent to Parcel B, meet the same criteria as Parcels 2 and 27; however, the plans show the provision of a berm in this location.

The remaining properties surrounding the Robin Dale site are owned by the Dobson family and the applicant has provided an agreement between themselves and the Dobson family specifying an understanding between the two parties. This understanding outlines the applicant's intention to mine the Robin Dale site without the construction of berms along these specific property lines

and that any residential development proposed by the Dobson family over the five-year term of the agreement would require the applicant to install berms at that time. The agreement has the option for a one-time extension of two years. Based on this agreement, the noise report also included an evaluation of the proposed noise impacts without the construction of berms. The noise report concludes that noise levels at the farthest property boundary of the abutting properties owned by the Dobson family are anticipated to be well below the state standard of 65 dBA. The mining, site, landscape, and Type 2 tree conservation plan set needs to be revised to clearly label all adjacent properties with the following information: Lot or Parcel identification, current owner, and if it is subject to the aforementioned agreement.

For the evaluation of non-point source/traffic noise, the noise report prepared by Scantek, Inc. indicates that the dump trucks entering McKendree Road will mix in with existing traffic levels and that the trucks will contribute a negligible amount to the entire existing and future traffic volume. The noise report also provides an evaluation of the dump truck traffic along the off-site haul road, labeled as a “pass-by” evaluation in the report. This evaluation was performed to address the proposed noise impacts along the off-site haul road; specifically, those potentially impacting the Timber Village subdivision located within close proximity to the haul road. The pass-by evaluation was modeled using the maximum sound output of a single pass of a dump truck measured every two meters along the length of the off-site haul road at three different receiver locations: two on Parcel 10 and one on Lot 35 of Timber Village. The pass-by evaluation concludes, as stated in the April 22, 2011 air report prepared by Scantek, Inc., that sound levels at all three receiver locations are expected to be below the 65 dBA state standard.

Visual Impacts

The visual impacts of the subject 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 viewing, 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 effects 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 designated historic roads. The entrance to the site is located along a segment of McKendree Road that is a designated historic road. A visual quality assessment plan was stamped as received by the Environmental Planning Section on March 17, 2010. This plan shows two photographs along McKendree Road from the site frontage as well as four other similar viewsheds along McKendree Road.

Access from the Robin Dale site onto McKendree Road is limited to an approximately 2,000-foot-long and 22-foot-wide entrance road that is included as part of the subject site on Parcel A. Because the site is set back from the road and is surrounded by other wooded parcels, the proposed mining operation is not expected to be visible from McKendree Road.

The properties within the viewshed of the area to be mined are either wooded or have been cleared under previously approved special exceptions for existing mining operations. There are no existing residences in the viewshed of the limits of mining for the Robin Dale site; however, the Timber Village Subdivision is located within close proximity to the off-site haul road, with residences located as close as ± 450 feet.

The mining site, landscape, and Type 2 tree conservation plans, stamped as received by the

Environmental Planning Section on March 31, 2011, show the location of the proposed haul road connection to the south, where it meets an existing haul road on the adjacent property to the south. This haul road was approved under Special Exceptions SE-2970 and SE-4479. The entrance to the subject property is located approximately 4,000 feet north of this existing haul road entrance. Based on the 2009 aerial photograph available on PGAtlas, the entrance of the existing haul road onto McKendree road has an existing wooded buffer ranging from approximately 150 to 300 feet in width.

The sight distance along McKendree Road at the location where the existing haul road enters McKendree Road appears to be greater than at the location of the subject property's own access point. A greater sight distance promotes greater safety for trucks entering traffic along McKendree Road making the existing haul road a more desirable location with regard to safety.

No impacts to the viewshed are anticipated with this application because the mining area is located at a significant distance from McKendree Road, approximately 2,000 feet, and because no existing residences are located within the viewshed of the limits of mining for the Robin Dale site. The Timber Village Subdivision has been identified within close proximity, approximately ± 450 feet, from the off-site haul road. The view of the off-site haul road from the Timber Village subdivision is not expected to change if the subject application is approved because the haul road exists today, it was approved for use as a haul road under special exceptions for adjacent properties, and no significant alterations to the haul road are proposed as part of this application.

The existing haul road that is proposed to be used for the subject application is located on Parcels 8 and 10, both owned by the Dobson family. The applicant has provided an agreement between themselves and the Dobson family to allow access to the haul road for use as part of the subject special exception. The agreement appears to only specify access through Parcel 10; however, access to the haul road through both Parcels 8 and 10 would be necessary. A revised agreement should be provided to clarify that the Dobson family has agreed to allow access to the Robin Dale mining site along the haul road through both Parcels 8 and 10.

Hydrology and Impacts to Wells

A Hydrologic Impact Evaluation report, prepared by Advanced Land and Water, Inc. dated September 7, 2010, was stamped as received September 9, 2010. The report includes soil boring data, piezometer hydrographs, and well location information with an exhibit. Both stratigraphic and local cross section information was also provided.

The Hydrologic Impact Evaluation report indicates that groundwater levels are expected to be affected by the mining operation. The report indicates that mining is proposed to extend to a depth of approximately 25 feet. The water table ranges from approximately 13 to 14 feet below the surface based on the piezometer readings on-site. Mining is expected to extend approximately 11 to 12 feet below the water table.

Because mining is proposed to occur at a depth below the existing water table, temporary, localized dewatering is necessary for safe resource extraction. Some of the withdrawn water will be used for dust suppression; however, much of the water will be stored in ponds located on-site. Dewatering is proposed through the interception, pumping, and storage of groundwater. The water will be purposefully discharged through professionally engineered and permitted water handling systems. Only mineral extraction is planned and no washing or processing of raw material is proposed on-site.

The report indicates that no existing wells are located within a 1,100-foot radius around the site. The report also indicates that, if undocumented wells exist, the potential for adverse impacts upon such wells appears low based on the distance from the mined area (greater than 1,100 feet), the relatively shallow depth of mining, the temporary and local nature of the planned dewatering operations, and the availability of deeper aquifers. Because no wells have been documented within the vicinity of the site, no drawdown calculations were provided.

Although no impacts to surrounding wells are anticipated, the applicant has committed to providing new wells for any property owner whose well is affected by the mining. A condition is proposed to address this situation should it arise.

Additional Issues Addressed in the EIR

Additional environmental issues were discussed in the EIR for the subject property including air quality, transportation, and archeology. 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 Historic Preservation Section has concluded that the proposal will have no effect on identified historic sites, resources, or districts. The applicant submitted a Phase I archeological investigation for the site. Upon review by the staff archeologist, it was concluded that additional investigations were not warranted.

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 nonattainment 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 the *Prince George's County Landscape Manual* since there is change in use to one in a higher use category (i.e., from a golf course to a sand and gravel mine). The landscape plan shows compliance through the retention of wide areas of woodland along the site's periphery.
- K. **Sign Regulations:** Other than the required sign identifying the mine operator, no signage is shown on the site plan, and the statement of justification indicates no signs are proposed with this application.
- L. **Zone Standards:** This proposal is in compliance with the standards set forth in the County Code for the R-A Zone.
- M. **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.

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

Comment: With the conditions of approval contained at the end of this application in place, the proposed use is in conformance with the requirements and regulations of the Zoning Ordinance. No other 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: The proposed special exception is in conformance with the recommendations and environmental provisions of the General Plan, the area master plan and the Countywide Green Infrastructure Plan as noted herein. The proposed use is in conformance with the master plan because the proposed mining operation is in keeping with the sand and gravel section of the Subregion 5 Master Plan.

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

Comment: 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-4669). 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;

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

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

Comment: A Type 2 Tree Conservation Plan (TCP2-061-09) was submitted for review concurrently with the special exception site plan. Minor revisions to the TCP2 are required for conformance with the Woodland Conservation Ordinance, as described in the Environmental Review section above.

(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.

Comment: The TCP2 shows only minor encroachments into the regulated environmental features. A letter of justification for the proposed impacts was received on March 31, 2011. The special exception proposes impacts to the primary management area (PMA) in order to install two stormwater management outfalls. These impacts total 1,980 square feet and are considered necessary to the orderly development of the subject property.

CONCLUSION

Based on the preceding analysis and findings, staff is recommending that Special Exception Application No. SE-4669 be APPROVED, subject to the following conditions:

1. Prior to certification of the special exception, the mining site plan shall be revised to show proposed paving on the haul road at its entrance point onto McKendree Road, for a distance of no less than 200 feet. Details for the paving shall also be provided on the mining site plan and shall include, at a minimum, the following information: length and width of pavement (minimum of 200 feet long and 22 feet wide), type of paving material, and timing (prior to the commencement of mining).
2. The applicant shall notify The Maryland-National Capital Park and Planning Commission (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.
3. 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 a representative of the M-NCPPC, Environmental Planning Section, prior to the installation of sediment/erosion control measures and tree protective devices.
4. Prior to certification of the special exception, the Type 2 tree conservation plan shall be revised as follows:
 - a. Revise the worksheet so that the row labeled as "Cumulative Woodland Conservation Required" is filled-in.
 - b. Revise all floodplain notes located on any sheet within the entire plan set (Sheet 1 through 13) to refer to a floodplain study number and to remove the name of the individual who prepared the study.
 - c. Remove all woodland preservation hatching and labels for woodland within the floodplain.

- d. Revise woodland conservation areas to ensure that all areas labeled as preservation are located outside the limits of disturbance (LOD) and all areas labeled as clearing are located within the LOD. Revise the LOD as necessary so that it encompasses all areas of proposed clearing.
 - e. Provide a sheet within each of the plan subsets (landscape and TCP) to show the entire length of the proposed off-site haul road.
 - f. Show all stormwater management structures on the plan (outfall pipes, rip-rap, etc.).
 - g. Show temporary tree protection fence along all clearing edges including vulnerable edges along the property boundary.
 - h. Revise the symbol for the permanent reforestation signs located along the edge of all reforestation areas to be larger.
 - i. Remove the symbol for proposed treeline from the plan.
 - j. Provide a woodland conservation summary table similar to Table A-6B of the Technical Manual for the the Woodland Conservation Ordinance (for a summary of all woodland conservation statistics for each phase of mining).
 - k. Revise the woodland conservation worksheet to ensure that the areas used for calculation purposes match those shown on the plan and as summarized in table form.
 - l. Have the qualified professional who prepared the plan sign and date it and update the revision box with a summary of the revisions made.
5. Prior to certification of the special exception, a copy of the approved sediment and erosion control plan shall be submitted to M-NCPPC.
 6. Prior to commencement of the mining operation, a county grading permit shall be obtained for the installation of the paved entrance, the proposed landscaping, and the proposed reforestation. A reforestation bond shall be posted prior to grading permit issuance.
 7. 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 Subtitle 4, Building Code, Section 4-303.
 8. Prior to county grading permit issuance, a conservation easement shall be recorded in the land records that describe the primary management area (PMA) by bearings and distances except for the areas of approved impacts and the areas of woodland conservation proposed on the approved TCP2. The conservation easement shall be reviewed by the Environmental Planning Section prior to recordation.
 9. Prior to certification of the special exception, the applicant shall provide a revised agreement, recorded in the land records, which clearly indicates that the Dobson family has granted access to the Robin Dale mining site through both Parcels 8 and 10.
 10. Noise mitigation shall be provided on-site by implementation of the following:

- a. Mining operations on the site are restricted to the hours of 7:00 a.m. to 5:00 p.m., Monday through Friday, excluding federal holidays. There will be no operations on Sundays. There will be no hauling of materials on Saturdays. Trucks should not be permitted to arrive at the site prior to 7:00 a.m.
 - b. Trucks shall not use compression or “Jake” brakes both on-site and on the roadway.
 - c. Speeds on-site shall be restricted to 15 miles per hour for all heavy vehicles.
 - d. All machinery shall be kept in good working order, especially mufflers to ensure quiet operation.
 - e. The volume of backup warning devices shall be minimized while still meeting OSHA (Occupational Safety and Health Administration) standards.
 - f. Acceleration for trucks entering the highway shall be held to a minimum.
11. The mining, site, landscape and Type 2 tree conservation plans shall be revised to clearly label all abutting properties with the following information: lot or parcel identification, current owner, and if it is subject to the agreement between the applicant and the Dobson family. The properties included in the agreement shall also be provided in list form on the cover sheet of each plan subset (i.e. the landscape plan set, the TCP plan set, etc.).
12. Should residential development commence on any part of abutting property now owned by the Dobson family at any time during the duration of the mining operation, those berms needed to buffer noise at required levels abutting the area of the Dobson property being residentially developed shall be installed by the applicant or its successors. Those portions of the berms required to buffer residential development shall be installed and completed prior to issuance of the first building permit on the property being residentially developed.
13. 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. Sweeping of the paved roads with road sweeper will occur as needed.
 - c. Open-bodied vehicles transporting materials shall be covered at all times when in motion. Alternate means may be employed to achieve the same results as would covering the vehicles.
 - d. A truck wash rack shall be established at the site to remove dust from vehicles prior to entering McKendree Road.
 - e. The site shall have a 15 mile per hour speed limit to reduce dust generation from travel on the unpaved portions of the proposed haul road.
 - f. 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.

14. 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 Code of Maryland (COMAR) 26.10.01.17. Care shall be taken to minimize spillage. Refueling shall take place as far from streams and wetlands as possible.
15. 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, 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.
16. At McKendree Road and the site entrance, the applicant should provide a "No Left Turn" turn prohibition sign for trucks exiting the site.
17. The number of truckloads per day shall be limited to 200 truckloads per day in accordance with the assumptions in the traffic impact study.
18. The access roadway should be overlaid to a minimum width of 22 feet for a distance of 200 feet. The overlay and any needed signage and pavement markings shall be done to the standards of the Prince George's County Department of Public Works and Transportation (DPW&T).
19. The applicant will provide three additional copies of the final report detailing the Phase IB archeological investigations prior to any ground disturbance or the approval of any grading permits.