
PROTECTING WADES SAVANNA, NEARBY RESIDENTS & THE MARSHYHOPE SCOUT CAMP FROM MINING IMPACTS

AN INITIAL STRATEGY ANALYSIS

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GOAL

To preserve the 392-acre property owned by Horsey Family LLC in a natural state.

BOARD OF APPEALS OBJECTIVE

To prevent the issuance of a special exception for the mineral extraction and processing uses proposed for the 392-acre site owned by Horsey Family, LLC.

CASE SUMMARY

The Horsey Family LLC mineral extraction and processing proposal will impact to two features that exist nowhere else in Dorchester County: Wades Savanna and the Marshyhope Scout Camp. Impacts to both meet the primary test for denying a special exception in Maryland, as established in *Schultz v. Pritts*.

Wades Savanna

This wetland ecosystem supports a number of rare, threatened and endangered species. It is the only wetland of its kind in Maryland and one of seven that exist globally. It is likely that a professional soil scientist, can testify that the proposed 70-foot deep extraction pit, which will be 25-feet from the wetland, will cause a substantial lowering of the water table in Wades Savanna. The Regional Ecologist for the Maryland Department of Natural Resources. The ecologist will likely testify that the water table lowering predicted by the soil scientist will cause severe and irreversible harm to Wades Savanna. Both should qualify as expert witnesses.

Marshyhope Scout Camp

The 1500-acre Marshyhope Scout Camp adjoins the southern boundary of the proposed mining site. More than 10,000 scouts and their families visit the camp every year. Mining is proposed within 25 feet of the reservation boundary. A number of key activity centers are located in close proximity to the proposed mining area. Mining will force the Scout Council to relocate these activity centers due to both safety and aesthetic concerns. The unique ecosystem contained in Wades Savanna is the centerpiece of the environmental education program at the Henson Reservation. A number of the camp foot trails border the Savanna and other habitats threatened by the mining operation. The loss of Wades Savanna would severely diminish the environmental education scouts experience at the camp. The applicant has also announced their intention to use barges to transport sand and gravel on Marshyhope Creek. The barge traffic would pass through a portion of the Creek heavily utilized by scouts for canoeing, sailing, and other activities. The barge traffic would pose yet another set of safety and aesthetic concerns that would degrade the peaceful, natural environment that makes the Marshyhope such a great scout camp.

Nearby Residents

The Smith, Jones and White homes are part of a neighborhood located on the northwest boundary of the mining sites. The mine will impact neighborhood residents through: noise, dust, air pollution, visual impacts, loss of property value, and possible well impacts.

REFERENCED DOCUMENTS

A number of reports, letters, and other documents are referenced in this analysis. Most have been posted on the Community & Environmental Defense Services (CEDS) website at: <http://ceds.org/SWS.html>. Many of these documents were converted to searchable Adobe pdf files. In other words, once a document is opened you can press Ctrl+F and search a document for word(s) or phrases to find text pertaining to a particular subject.

SCHULTZ V. PRITTS ISSUES

Following is a layman's interpretation of Maryland case law regarding when a special exception can be denied. The following and all other portions of this analysis must be verified by a competent attorney.

In *Schultz v. Pritts*¹, the Maryland Court of Appeals established the primary test for determining whether a special exception can be denied:

"...the particular use proposed at the particular location proposed would have any adverse effects above and beyond those inherently associated with such a special exception use irrespective of its location within the zone."

In other words, we must present facts before the Board of Appeals which demonstrate that the proposed mineral extraction and processing operation will have a greater adverse effect on the Horsey Family LLC site when compared to all other similarly zoned lands in the County. If we fail yet the Board still opts to deny the special exception then there's a very good chance the denial will be reversed when the applicant appeals.

Schultz v. Pritts issues usually result from two scenarios. First, uniquely important features exist within the impact zone, and at few other locations with the same zoning, and these features are sensitive to the impacts caused by the use. Second, there are no uniquely important features nearby but conditions unique to the site magnify impact intensity or the area of impact beyond that which is usually caused by the use.

With respect to the first scenario, the site is zoned Agricultural Conservation (AC) and Agricultural Conservation/Resource Conservation Area (AC/RCA). Figure 2.1, in the Dorchester County 1996 Comprehensive Plan, shows that about 35% of the County is zoned AC. There are at least two features within the impact zone that occur on no other AC-zoned lands in the County: Wades Savanna and the Marshyhope Scout Camp. Other possible unique features may include Dukes Cemetery which is rumored to contain Native American graves. There would be value in interviewing area historic preservation experts or archaeologists about the significance of the cemetery and other features which may exist on the site, like the former farmhouse.

¹ 291 Md. 1, 432 A.2d 1319 (1981).

Wades Savanna Impacts

Wades Savanna is the most sensitive and unique environmental resource threatened by the proposed mineral extraction-processing operation. Wades Savanna has been characterized as one of only seven wetlands of this type in the world. In 1998, the Friends of Marshyhope cited Wades Savanna as one of the last great places in the (USA, world, ???). As will be seen in the remainder of this section, there is good reason to believe that the mineral extraction-processing operation will irreparably harm Wades Savanna by altering water table elevations and flow patterns which are essential to maintain this unique, complex aquatic ecosystem. The noise emitted by the operation also poses a threat to the uniquely important species inhabiting Wades Savanna and other nearby habitats.

In comments² dated March 12, 2008, the Regional Ecologist for the Maryland Department of Natural Resources (DNR) Wildlife & Heritage Services, stated:

This particular project stands out as having a long list of sensitive resources potentially impacted, directly and/or indirectly. This area is one of the richest ecologically that we have on the Shore. The forests are designated habitat for Forest Interior Dwelling Birds (FIDS). A 2007 photo-monitoring study by Three Square Wildlife Services documented the federally and state-endangered Delmarva Fox Squirrel also residing in these woods. The swamps and marshes associated with Marshyhope Creek are designated as Wetlands of Special State Concern (WSSC) in COMAR. Likewise, these same areas plus adjacent upland areas are designated in COMAR as part of the Upper Nanticoke River Marshes and Swamps Natural Heritage Area (NHA), a title that recognizes that this natural community is among the best Statewide examples of its kind. A pair of the state-threatened Bald Eagle nests on the property and another pair nests nearby to the south. Ancient inland sand ridges, part of a unique natural community known as Inland Dune Ridge Forest, on the adjacent Henson Boy Scout Camp harbor 2 state-listed plant species which also likely occur on similar sand ridges on the Horsey property.

But the crowning jewel to the entire [Horsey Family LLC] property is a unique wetland known as Wades Savanna. This wetland is the only known Maryland occurrence of a globally rare community type called Central Coastal Plain Basin Swamp.

In his comments the ecologist characterized the potential impact of the mineral extraction-processing operation as follows:

The sand and gravel mine, if constructed as proposed, would have serious and irreversible impacts to most of the sensitive resources that occur on the Horsey tract. These impacts are borne out in a number of regulatory issues associated with the proposed surface mine:

² See DNR Comments on the CEDS webpage at: <http://ceds.org/SWS.html>.

1) *Natural Heritage Area (NHA)* - The NHA also encompasses the WSSC associated with Marshyhope Creek. COMAR states that the structure of the vegetation and species composition must be maintained within NHAs, thus the area within NHAs cannot be significantly altered. The proposed surface mine may affect the hydrology of the NHA resulting in change to the vegetative structure and/or composition. Noise pollution and the effects of increased human activity, particularly truck traffic, will have negative affects that extend into the NHA on wildlife resources.

2) *Delmarva Fox Squirrel (DFS)* - It appears that most of the currently existing forest on the southern half of the property will be permanently removed by the surface mine. DNR guidelines, based on the Federal Recovery Plan for DFS, call for retention of at least 25% of the forested acreage on a development site, with as much of this being contiguous as possible. The DFS guidelines also call for stream and nontidal wetland buffers to be a minimum of 100 feet and preferably expanded to 300 feet. Retention of mast-producing trees such as oaks should be encouraged. Retaining a forested buffer of at least 300 feet on the west side of Wades Savanna and associated wetlands extending to the north will help meet this criterion, and will also link these forested areas with contiguous forested habitat on the adjacent Boy Scout Camp, providing habitat connectivity for DFS, FIDS and other wildlife. Because DFS is also a federally-listed species, Mary Ratnaswamy of the U.S. Fish & Wildlife Service-Chesapeake Bay Field Office should be contacted for comment on this proposal.

3) *Forest Interior Birds (FIDS)* - Recommendations found in *A Guide to the Conservation of Forest Interior Birds in the Chesapeake Bay Critical Area (2000)* should be followed. This project will result in permanent loss of FIDS habitat on the southern half of the property if the project proceeds as proposed.

4) *Nontidal Wetland of Special State Concern (NTWSSC)* - As stated on page 2, Wades Savanna is a proposed NTWSSC and is treated as such by DNR. The boundaries of this NTWSSC should extend north along the series of wetlands that were the former stream channel which help hydrologically feed Wades Savanna. Without maintaining the current hydrology of this series of wetlands, Wades Savanna will cease to exist in its present form. NTWSSC require minimum 100-foot buffers (COMAR). However, the 100-foot buffer protection requirements are inadequate to protect the hydrology of this site from the hydrologic impacts of a 75-foot deep pit. The hydrologic study (dated Nov. 12, 2007) included in permit applications determined that there would be a groundwater drawdown at a radius of 2000 feet of 0.5 feet, and concluded that this was a negligible impact. Even impact on hydrology of that amount could negatively affect the unique balance that has resulted in formation of the rare community at Wades Savanna. However this study failed to address hydrologic impacts to areas closer than 2000 feet, which follow an inverted bell-shaped curve. The 2000 feet is at the tail end of this curve. Areas closer to the 75-foot pit will experience greater permanent impacts to hydrology, i.e., they are "in the bell". Thus the proposed 25-foot buffer from Wades Savanna will be directly in a high

hydrologic impact area and will be irreversibly altered. This appears to be completely counter to the intent of designation as a NTWSSC.

A soil scientist was retained by the Friends of Marshyhope to review a hydrologic evaluation prepared by the applicant's consultant. The scientist also examined soil conditions adjoining Wades Savanna and the mining site. He did this while remaining on the property of the Marshyhope Scout Camp. Of course, the scientist had permission to walk camp property.

As noted in the DNR comments, the applicant's hydrologic study showed that the mineral extraction-processing operation would cause the water table to decline 0.5-feet at a distance of 2,000 feet from the edge of the proposed 140-acre pit. Figure 1, which follows this page, is an excerpt from Sheet C-6.0, from the applicant's plans entitled *Marshyhope Surface Mine, Eldorado*.

The excerpt shows that the edge of the pit will be 25 feet from the edge of Wades Savanna. As the ecologist so correctly noted in the DNR comments, if the water table drawdown will be a half-foot at 2,000 feet then it will certainly be far greater in Wades Savanna just 25 feet distant. To put this in perspective, the portion of Wades Savanna surveyed by Mr. Smith on March 14, 2008 was mostly three-feet deep or less. So even if the drawdown were only a half-foot in the Savanna I believe the ecologist would still view this as having *serious and irreversible impacts to most of the sensitive resources that occur on the Horsey tract*.

Of course the water table decline will be much greater than the half-foot predicted by the applicant's consultant at 2,000 feet. It is my understanding that Mr. Stein believes there are errors in the applicant's hydrologic study which resulted in an underestimate of the water table drawdown by a factor of three. If I understand the soil scientist's concerns correctly, these errors translate to a 1.5-foot drawdown at 2,000 feet from the pit and a tripling of the far more substantial drawdown in Wades Savanna just 25-feet from the pit.

An expert has not been engaged to model the noise impact of the proposed mineral extraction and processing operation. Therefore we cannot quantify the degree of increased noise caused by the operation within Wades Savanna and the other sensitive areas identified in the DNR comments.

On Friday, March 14, 2008, I reviewed the Board of Appeals file in the Dorchester County Planning & Zoning office in Cambridge. The only applicant submittal which even remotely addressed the impacts to Wades Savanna was *Horsey Family, LLC Special Exception Application Narrative*³.

³ See Application on the CEDS webpage at: <http://ceds.org/SWS.html>.

On page one, the following sentence appears under the heading *Proposed Use*:

Most of the existing forest and virtually all of the wetland areas of the property will remain undisturbed.

At the top of page two, the preceding statement is partially contradicted with the following:

With the exception of limited wetland impacts associated with improving the existing Site access, no impacts to tidal or non-tidal wetlands are currently proposed for the mining use.

Further down page two, the following single paragraph appears under the heading of *Environmental Protection*.

The proposed mining operation is subject to numerous State and federal environmental laws. The site plan is designed in accordance with applicable County zoning restrictions and complies with State and local requirements for wetland protection and sediment and erosion control. The project is subject to water appropriation and surface mining permitting and review by the Maryland Department of the Environment. Required State permits will be obtained prior to construction of the facility, and it will be operated, at all times, in strict accordance with applicable permits, laws and regulations.

Obviously the preceding text from the applicant's narrative does not address any of the impacts noted in the DNR comments in a substantive way.

The Dorchester County Staff Report⁴ for this special exception case (#2338) cited the DNR comments and noted that:

New surface mining activities in Habitat Protection Areas are prohibited by Dorchester County Code (§100-14.E.5).

Chapter 100, cited above, covers Grading, Erosion and Sediment Control. The cited regulation (§100-14.E.5) reads:

(5) *Future surface mining operations shall be prohibited within the tidewater buffer and in other habitat protection areas where threatened and endangered species, rare groupings of species, areas of scientific value or other important natural resources occur. Future wash plants, including associated ponds, spoil piles and equipment, shall not be permitted within the established buffer area.*

⁴ See Dorchester County Staff Report on the CEDS webpage at: <http://ceds.org/SWS.html>

Regulation §100-14.C(1) defines a *Habitat Protection Area* as:

A site or zone of special significance that provides a living environment for valuable plant or animal species. "Habitat protection areas" include the tidewater buffer, nontidal wetlands, habitat for species of concern, plant and wildlife habitat and anadromous fish propagation waters.

Regulation §100-14.C(1) mandates the expansion of the Tidewater Buffer from the normal 100 feet from tidal waters, tidal wetlands or tributary streams to include hydric soils and nontidal wetlands. Figure 2, on the next page, consists of a soil map covering the vicinity of the mining site. The boundary of the Horsey Family property is shown with a yellow-dashed line. The critical area boundary appears as a red-dashed line. The numbers on the map are the identifiers used to note the various soils occurring on the property. Eight of the numbers are outlined with a pink-purple rectangle which means the soil is hydric.

Note that hydric soils extend throughout about two-thirds of the portion of the site located within the critical area. In the DNR comments the ecologist noted that the upland forests on the site are populated by the endangered Delmarva Fox Squirrel. Therefore either hydric soils or the habitat of an endangered species occurs throughout the half of the site lying within the critical area. This means that the entirety of the site within the critical area should be treated as a *Tidewater Buffer* and Regulation §100-14.E.5 precludes the Board of Appeals from issuing a special exception permitting mining within the critical area.

Richard A. Marshyhope Scout Camp

The Marshyhope Scout Camp occupies a 1,500-acre area at the confluence of Marshyhope Creek with the Nanticoke River. More than 10,000 scouts and their families visit the camp every year.

The reservation abuts the southern boundary of the 392-acre site proposed for mineral extraction and a processing operation by Horsey Family LLC. Figure 3, which follows this page, shows the close proximity of the proposed mining operation to the scout camp as well as areas heavily utilized by scouts for various activities. In comments dated March 10, 2008⁵, the Scout Council noted the following impacts to the camp:

- *The proposed mining as currently planned will operate within approximately 50 feet of a key outdoor program area utilized by Boy Scouts at Marshyhope Scout*

⁵ See BSA Comments Letter on the CEDS webpage at: <http://ceds.org/SWS.html>.

Figure 2: Mining Site Boundary with the Critical Areas Line and Hydric Soils Noted

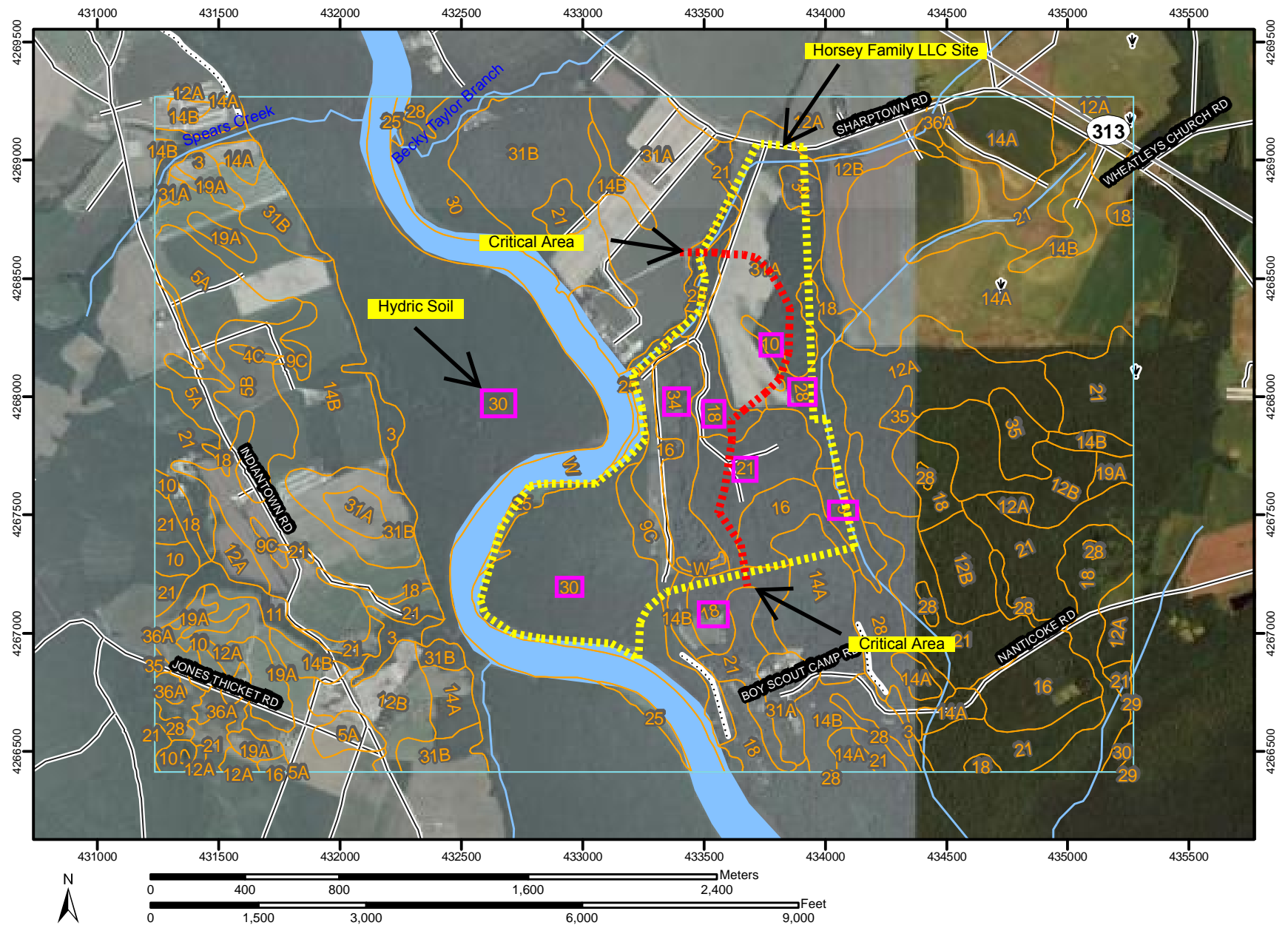
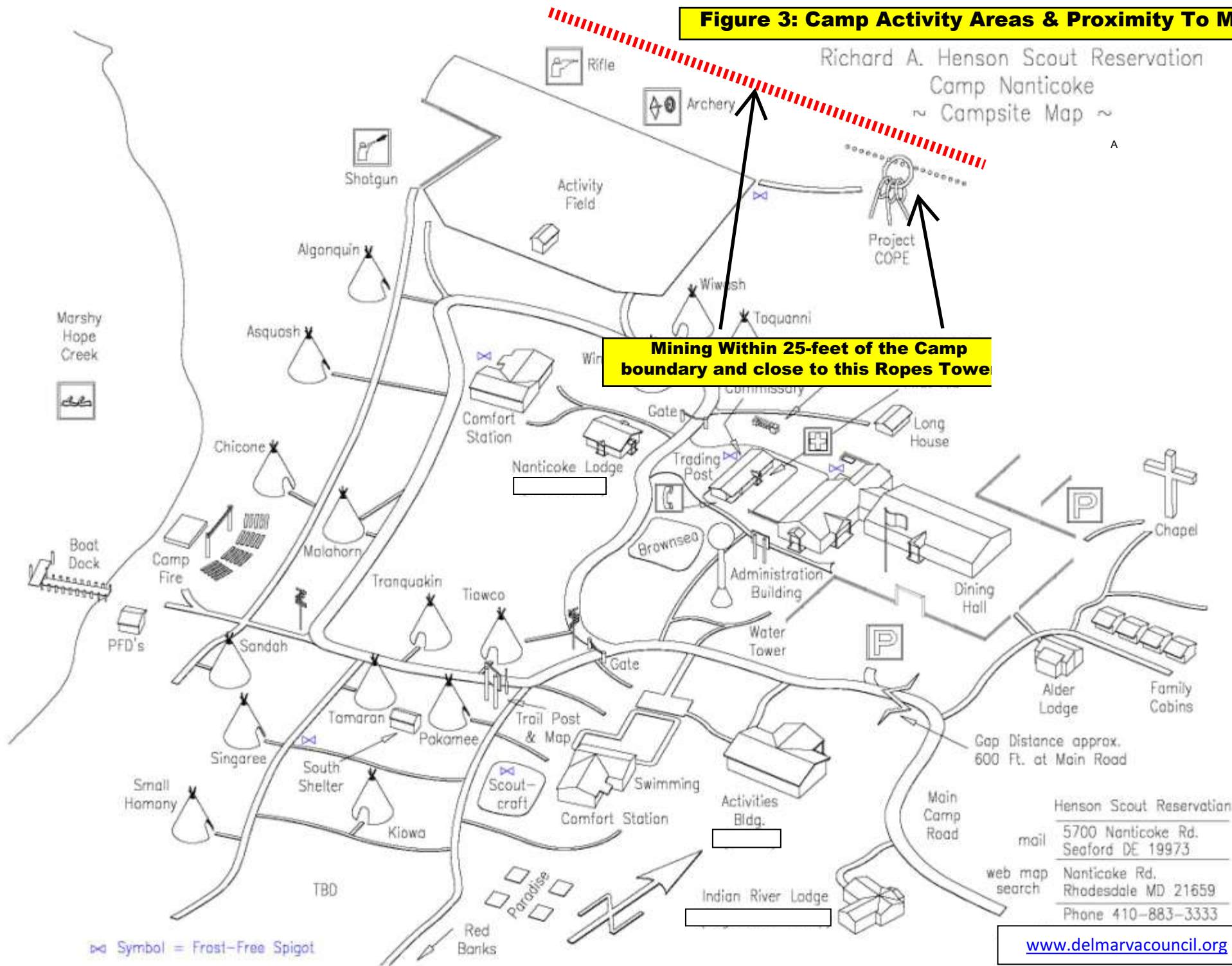


Figure 3: Camp Activity Areas & Proximity To Mining



Mining Within 25-feet of the Camp boundary and close to this Ropes Tower

Henson Scout Reservation
 mail 5700 Nanticoke Rd.
 Seaford DE 19973
 web map search Nanticoke Rd.
 Rhodesdale MD 21659
 Phone 410-883-3333

www.delmarvacouncil.org

- *Reservation year-round since the mid 1980's. This outdoor ROPES course site is comprised of many elements in a wooded area, the most notable of which is a 60 foot tall climbing tower in close proximity to the same property boundary on which Horsey Family LLC plans to mine within 25 feet. In addition the camp trail system traverses the north-south property boundary along the eastern most edges of the mining area, at times within 25 feet of the proposed mine. The safety concerns of conducting the Scouting program in such close proximity to deep water and mining equipment are of paramount concern. The degradation of the outdoor experience for boys participating in the program is also of strong concern with regard to noise, view, and elimination of natural wooded areas.*
- *Along another portion of the same property boundary, the proposed mining operation will come within 25 feet of a designated wetland boundary of statewide significance, known locally as Wade's Savanna. Most of the property on which this wetland exists is owned by Horsey Family LLC or the Council. The Boy Scouts utilize this wetland for hiking and nature education for the study of nationally rare plants and animals. Any degradation of the wetland area by the proposed project would have a significant negative impact on the programs and property of the Scout Council. The surrounding woodlands provide important habitat for rare wildlife species studied by Boy Scouts including the Delmarva Fox Squirrel and American Bald Eagle. We believe any change in the travel of surface water and/or level of the water table will have a detrimental effect on this unique wild area.*
- *The camp is currently served by two 80 foot deep non-community public water wells with pumps set at approximately 40 feet. We are concerned that activity in such close proximity to these shallow wells, in the same aquifer that provides the drinking water for almost 10,000 boys and their families per year, will negatively impact our water supply.*
- *The property at Marshyhope Scout Camp is held in a perpetual conservation easement by the Maryland Department of Natural Resources. The unique characteristics and key location of Marshyhope Scout Camp in the midst of an environmentally sensitive natural area made the reservation a prime target for preservation by the US Fish & Wildlife Service. The Friends of Marshyhope and the Maryland Department of Natural Resources for protection from future development and subdivision. Through this easement the Scout Council has agreed to protect the large blocks of contiguous forested land needed to protect the wildlife and waterways in the Nanticoke River Watershed. The utilization of this property as a Boy Scout camp is in direct concert with other conservation agency goals. The approval of this project as currently proposed will lead to the destruction of significant woodland habitat contiguous with the Boy Scout camp woodlands. Removal of the Horsey Family woodland will significantly reduce the wildlife habitat value of the Boy Scout property.*

I understand that since the Council drafted its March 10th letter another concern has emerged. Representatives of Horsey Family LLC attended a community meeting held at the Eldorado Fire Hall. At that meeting the Horsey Family representatives announced their intention to operate the mineral extraction and processing operation 24 hours a day, seven days a week. They also stated their intention to seek approval to use barges to transport sand and gravel from the site.

The only mention of hours of operation in the Board of Appeals file appeared on page four of *Horsey Family, LLC Special Exception Application Narrative*⁶, under item (d). The first sentence reads: *The proposed mining use will be operated primarily during daylight hours.* Section 155-50BB, of the *Dorchester County Zoning Ordinance*, sets forth the requirements a mineral extraction activity must meet to receive a special exception. This section is silent on hours of operation. In summary, there is nothing to prevent the mine from operating 24/7.

The applicant's submittals are also silent with respect to barging. Instead, the application states that trucks will be used to transport sand and gravel from the site. Barging could have a very substantial impact upon not only the Henson Camp but also the health of Marshyhope Creek. During the summer many scouts canoe or sail on Marshyhope Creek. Since the Horsey Family site is upstream of the camp each barge must pass through the waters frequented by the scouts twice. The Horsey Family representatives are reported to have said that the barges draw ten- to eleven-feet of water. Area residents who know the Marshyhope say the creek is only seven deep where it enters the Nanticoke River. Before barging could begin the Creek would need to be dredged. Dredging alone could cause considerable harm to the Marshyhope Creek ecosystem. Additionally, the prop wash from the barges would likely resuspend large quantities of bottom sediment in areas where water depth is greater than eleven feet, but less than, say, twenty feet. The resuspended sediment could magnify the harm done by barging to the numerous sensitive species inhabiting Marshyhope Creek.

OTHER ISSUES

A number of other issues exist which are very serious concerns but do not appear to meet the *Schultz v. Pritts* test. However, Section 155-20C, of the *Dorchester County Zoning Ordinance*, requires the Board of Appeals to make nine findings prior to granting a special exception. All of the *other* issues are pertinent to one or more of these required findings. Following is a summary of the non-*Schultz v. Pritts* issues.

Property Value

There are a number of homes located to the northwest of the proposed mining site. These homes include those owned by the Smith, Brown, and White families. The nearest home is within 200 feet of the site boundary and 300 feet from the proposed haul road. The Smiths are also building a new home within 500 feet of where the access road will intersect MD 313. Obviously the

⁶ See Application on the CEDS webpage at: <http://ceds.org/SWS.html>

Browns began building their new home long before they heard that a mining operation might start so near.

A number of studies have documented that increased truck traffic can lower the values of homes by ten percent or more⁷. The impact is due primarily to noise but can also be attributed to potential home-buyer concerns about air pollution-respiratory health, vibration impacts to foundations, and to the industrial feel high volumes of heavy truck traffic can give to an area. Generally, property value depreciation increases the closer the home is to a road and with increasing truck traffic volume.

The Dorchester County Staff Report⁸ noted truck traffic and noise as potential adverse impacts. The report contained a recommendation that *the Board should consider requesting additional testimony from qualified witnesses who might be in a better position to quantify the impacts of noise and traffic on neighboring properties.*

Noise

In addition to truck traffic, the proposed dredging and processing operation could be a significant source of noise. The applicant submittal *Horsey Family, LLC Special Exception Application Narrative*⁹ addresses this issue in only a very general way. The applicant did not submit a noise impact study. As noted above, the staff report contained a recommendation that *the Board should consider requesting additional testimony from qualified witnesses who might be in a better position to quantify the impacts of noise and traffic on neighboring properties.*

Air Quality

A study conducted by CEDS and the Johns Hopkins School of Public Health documented that large volumes of dump truck traffic can significantly increase the concentration of the fine air borne particulate matter. The study was conducted next to the access road for a combination rubble landfill and sand-gravel mining operation in Prince George's County, MD. The study documented an eleven-fold increase in the concentration of air borne particulate matter shortly after dump trucks began entering and exiting the site. Of course, the particulate matter is mostly from diesel exhaust, which exacerbates potential health effects. The applicant submittal *Horsey Family, LLC Special Exception Application Narrative*¹⁰ is silent on the issue of diesel truck emissions.

In addition to diesel exhaust, considerable dust concentrations could become suspended in the air above and near the mining operation. The dust would come from truck traffic on unpaved roads

⁷ See Traffic & Property Value on the CEDS webpage at: <http://ceds.org/SWS.html>.

⁸ See Dorchester County Staff Report on the CEDS webpage at: <http://ceds.org/SWS.html>

⁹ See Application on the CEDS webpage at: <http://ceds.org/SWS.html>

¹⁰ Ibid

and from other potential sources within the mine. Mention is made in *Horse Family, LLC Special Exception Application Narrative*¹¹ to dust control methods in general but does not specify what these measures will be nor does the narrative address effectiveness.

Visual Impacts

It appears that some forest will be retained between the mining operation and area roads, except of course at the entrance off MD 313. However, it is questionable whether the remaining forest will be sufficient to screen the operation from the view of nearby homes, particularly when trees are barren of leaves. On page five of *Horse Family, LLC Special Exception Application Narrative* it is stated that: *The proposed mining activities will be screened from view of all neighboring properties by areas of existing mature forest vegetation.* However, sightlines and other methods to assess visual impacts were not present among the applicant's submittals.

Should dust be a significant problem then this could create another visual impact. The dust could settle on nearby homes, landscaping, cars, and other surfaces. As stated above, the applicant's narrative makes a general reference to dust control without setting forth proposed methods and effectiveness.

Wells

Earlier reference was made to the comments letter from the Scout Council. In that letter it was stated that a well serving the scout camp was only 80-feet deep with the pump set at an elevation 40-feet below the land surface. The proposed pit will be 70 feet deep. The potential certainly exists that should the mining operation draw the water table down significantly then the scout camp well and other shallow wells in the area might become insufficient to supply adequate water. This could become a *Shultz v. Pritts* issue if no deeper aquifer exists which could supply potable water should the mine threaten shallow wells (and this is not the case elsewhere in Dorchester County).

REQUIRED FINDINGS

Section 155-20C, of the *Dorchester County Zoning Ordinance*, requires the Board of Appeals to make nine findings prior to granting a special exception. These nine findings follow along with the applicant text presented in *Horse Family, LLC Special Exception Application Narrative*¹² then an analysis by CEDS.

(a) Will be consistent with the County Comprehensive Plan;

Applicant's Text: The proposed special exception use is consistent with the County's 1996 Comprehensive Plan. The Property is mapped as a "Natural Resource Area" by Figure 2-1. Natural Resource Areas are described by the Plan as "portions of the County

¹¹ See Application on the CEDS webpage at: <http://ceds.org/SWS.html>

¹² Ibid

where the preferred uses are: conservation, natural resource based industries, and low density residential development." (emphasis added, p. 2-17). The proposed mining use will expand the County's economy through utilization of this existing natural resource. The economic development provisions of the Comprehensive Plan encourage the development and expansion of resource based industries, specifically including mineral resources. One of the Plan's goals is to "support mining in appropriate locations". " and, and to a lesser extent, gravel are the County's only mineral resources." (p. 3-15). The Plan noted that these mineral resources are primarily located north of Maryland Route 50, which is consistent with the Site's location.

Slightly over one-half of the Property (approximately 220 acres) is located within the Chesapeake Bay Critical Area and is mapped as a Resource Conservation Area (RCA). The Comprehensive Plan references the Dorchester County Critical Area Protection Program. The County's Critical Area Program is intended to minimize impacts on water quality, conserve fish, wildlife and habitat and accommodate future growth. The objectives of the Critical Area Program are implemented through regulatory measures "designed to protect forest, farmlands, mineral resources and habitat areas". These measures have been incorporated into, among other things, the Dorchester County Zoning Ordinance. RCA's "are characterized by natural environment such as wetlands or forest, or by resource utilization activities such as agriculture or surface mining." (emphasis added, CA Program, p. 10).

The proposed mining use is designed and will be operated in accordance with the Dorchester County Critical Area Program provisions concerning mineral resources, which are intended to allow mineral resources to "make a significant contribution to the economy" while minimizing potential adverse impacts and promoting site restoration.

CEDS Analysis: The following text appears on page 39, of the *Dorchester County Critical Area Protection Program* document, under the heading of Mineral Resources Plan - Requirements:

*Future surface mining operations will be **prohibited** in highly erodible soil areas, within the **tidewater buffer**, and in other **Habitat Protection Areas** where **threatened and endangered species, rare groupings of species, areas of scientific value, or other important natural resources occur. Future mining activities also will be prohibited where the use of renewable resource lands would result in the substantial loss of long-range productivity of forests or agriculture, or would result in a **degrading of water quality or loss of vital habitat.**** [Emphasis added]*

The following description of the *Tidewater Buffer* appears on page 41, of the Dorchester County Critical Area Protection Program document:

Dorchester County has determined that the tidewater buffer will be a minimum of 100 feet wide landward from the mean high water line of tidal waters, tributary streams, and tidal wetlands. The buffer will be expanded beyond 100 feet to include contiguous, sensitive areas of nontidal wetlands and soils with high erosion potential, and will be expanded to include hydric soils in cases where their disturbance may impact streams, wetlands, or other aquatic environments. Hydric soils and soils with high erosion potential are listed in table 4.

The preceding text mandates the expansion of the Tidewater Buffer from the normal 100 feet from tidal waters, tidal wetlands or tributary streams to include hydric soils and nontidal wetlands. Figure 2, referenced earlier in this analysis, consists of a soil map covering the vicinity of the mining site. The boundary of the Horsey Family property is shown with a yellow-dashed line. The critical area boundary appears as a red-dashed line. The numbers on the map are the identifiers used to note the various soils occurring on the property. Eight of the numbers are outlined with a pink-purple rectangle which means the soil within the area bounded by the solid yellow line is hydric. Note that hydric soils extend throughout about two-thirds of the portion of the site located within the critical area. In the DNR comments it was noted that the upland forests on the site are populated by the endangered Delmarva Fox Squirrel. Therefore either hydric soils or the habitat of an endangered species occurs throughout the half of the site lying within the critical area. Therefore the entire half of the site within the critical area should be treated as a Tidewater Buffer. This treatment would preclude the Board of Appeals from issuing a special exception that permitted mining within the critical area.

- (b) Will be in harmony with the general character of the neighborhood, considering population density, design, scale and bulk of any proposed new structures, intensity and character of activity, traffic and parking conditions and number of similar uses;**

Applicant's Text: The Site is located in a rural area. The low population density and existing forest vegetation on the Site and adjacent properties provide a unique opportunity for extraction of these significant mineral resources in a manner that is in harmony with the character of the neighborhood. Very few structures are associated with the proposed use. The site plan identifies a small office, truck weight scale and processing plant, all of which are located a significant distance from adjoining property lines and screened by existing vegetated buffers. The design, scale and bulk of these structures are consistent with that of nearby agricultural structures.

Adequate parking exists on the Site for the operators of the facility. The mining will be conducted via hydraulic dredge, which significantly minimizes the amount of vehicular and equipment traffic within the Site. As indicated by the response to (e) below, the traffic resulting from the proposed use will be safely accommodated by the improved entrance to the property. The vehicle traffic generated by the proposed use on the Site will be comparable to that which would occur at any other similar use within the County.

The rural character of the neighborhood, including the low population density, prevalence of agricultural structures and access to Maryland Route 313, make this Site more appropriate for the proposed mining activity than an area located close to a concentration of residential and commercial uses.

CEDS Analysis: The layout of the proposed haul road brings it very close (within 300-feet) of existing homes. Also the proposed entrance is just 500 feet from the home the Hilgers are presently building. It is appalling that the applicant ignores these impacts.

It is equally appalling that the applicant fails to address the substantial impacts to the Marshyhope Scout Camp in the context of this required finding. As noted in the comments letter from the Scout Council, the mining operation will occur in extremely close proximity to portions of the camp heavily utilized by the scouts. The Council may well be forced to abandon the considerable portions of their 1500-acre reservation rendered unfit for scout activities if the special exception is granted. Furthermore, the scouts may lose the use of wells located within the drawdown area generated by the mine. Finally, the reservation and the scouts will lose the truly unique environmental education benefits they derive from Wades Savannah and the other unique ecosystems impacted by the mine.

© **Will not be detrimental to the use, peaceful enjoyment, economic value or development of surrounding properties or surrounding neighborhoods;**

Applicant's Text: The operation of a sand and gravel facility on this rural site, well buffered by existing mature forest, will not be detrimental to the use, peaceful enjoyment, economic value or development of surrounding properties. No significant neighborhoods are located in the vicinity of the Site. Additionally, a significant portion of the surrounding properties located to the east, south and west of the subject property are owned by the Boy Scouts and State of Maryland and are protected from development.

Similar mining facilities exist in this area of Dorchester County. The historic mining activities conducted on the property do not appear to have affected the use, enjoyment, value or development of surrounding properties. The proposed use will be screened from the view of surrounding properties. The processing and material stockpiling activities conducted on the Site, are located a significant distance (1,200'+) from all property boundaries. Furthermore, the equipment proposed for the mining operation is specifically designed to reduce noise, such that the operation of the equipment will not affect even the closest properties. The vast majority of mining activities will be conducted by hydraulic dredge to minimize any impacts resulting from noise and dust.

Heavy agricultural machinery and trucks are common on Route 313. All transportation activities associated with this use will utilize the adjacent State highway, which has more than adequate capacity to accommodate the proposed use at acceptable levels of service.

At the conclusion of the proposed mining, this temporary use will cease and the reclaimed mining area will consist of a large lake, which may increase the value of nearby properties.

CEDS Analysis: First of all, I must beg to differ with the statement that *no significant neighborhoods exist in the vicinity*. The Smith, Brown, and Whites' and other residents adjoining the site have a very significant neighborhood. Furthermore, the Marshyhope Scout Camp constitutes a neighborhood consisting of 10,000 scouts and their families. The mining operation will have a very substantial impact upon the peace, enjoyment, and economic value these neighbors presently derive from their property. While the applicant claims the mining operation will be screened from view, they have not submitted sightline analyses or other documentation supporting this claim. The mining operation will be sufficiently close to some homes and the Scout reservation to pose a substantial visual impact. While it may be true that existing truck traffic is significant on MD 313, the mining operation will concentrate this traffic within 500 feet of the Hilger home yet the applicant has failed to analyze how this will impact this family.

(d) Will cause no objectionable noise, vibration, fumes, odors, dust, glare or physical activity;

Applicant's Text: The proposed mining use will be operated primarily during daylight hours. The use will cause no vibration, fumes or odors. Dust and noise will be minimized through the use of a hydraulic dredge. The access and haul road located on the Site will be improved and/or maintained as appropriate to minimize dust. The hydraulic dredge will float on the new lake, the level of which will be established by the groundwater, so the dredge activities will occur below existing grade. The physical activity generated by the proposed use will be comparable to that which would result from any similar surface mining operation. The area of greatest physical activity on the Site, the processing plant, office, and stockpiles, are located more than a thousand feet from all property boundaries and are screened by forested nontidal wetlands in the historic mining areas that will not be disturbed. Additionally, the entire mining area is surrounded by forest vegetation. No significant permanent lighting is proposed for the property. Accordingly, no objectionable glare will be generated by the proposed use.

CEDS Analysis: Horsey Family representatives have stated in public that the mine will operate day and night; not primarily during daylight hours. As documented earlier in this strategy analysis, mine truck traffic has the potential to cause substantial noise, dust, and fumes (air pollution). The applicant's submittals lack any of the analyses normally employed to assess the significance of these impacts.

(e) **Will have no detrimental effect on vehicular or pedestrian traffic;**

Applicant's Text: No pedestrian traffic exists in the vicinity of the Site or will be affected by the proposed use. The proposed use will not overburden or adversely affect existing public roads. The project is located immediately adjacent to and accessed by a major State highway. The entrance and access road for the Site will be improved in accordance with SHA specification and requirements to accommodate the projected traffic.

CEDS Analysis: For the applicant to claim no pedestrian traffic exists in the vicinity is almost as bad as the claim that no neighborhoods exist. The Marshyhope Scout Camp has an extensive network of foot trails that are used by most of the 10,000 people who visit the camp every year. If the special exception is granted then a significant portion of these trails will become unuseable either due to safety or aesthetic impacts. Additionally, MD 313 is heavily utilized by bicyclists. Guidelines for maintaining a road for bicycling call for limiting the amount of heavy truck traffic. Yet the applicant's submittals are completely silent on this form of vehicular use.

(f) **Will not adversely affect the health, safety, security or general welfare of residents, workers or visitors in the area;**

Applicant's Text: The proposed use will be conducted entirely on the Site and will be screened from adjacent properties. The mineral processing and stockpiling activities will occur approximately 1,000 feet from the shoreline of Marshyhope Creek and more than 1,100 feet from any neighboring property boundary. The proposed mining activities will be screened from view of all neighboring properties by areas of existing mature forest vegetation. No aspect of the operation will pose health, safety, security or general welfare hazards to residents or workers in the area. The applicant's representatives have maintained an on-going dialogue with representatives of the Boy Scouts of America to identify and evaluate potential concerns associated with the proximity of the Marshyhope Scout Camp. As the site plan review progresses, the applicant will continue to coordinate with the Marshyhope Scout Camp to insure that the proposed operation poses no health, safety, security or general welfare risks to visitors of the Boy Scout facility. Accommodations to address concerns related to the proximity of the scouting facility may include fencing of portions of the mining area to impede access by individuals who trespass on the Site.

CEDS Analysis: The text above was submitted to the County on February 19th. This text implies the applicant is working with the Scouts to resolve their concerns. Yet the March 10th letter from the Scout Council clearly shows the applicant has been unsuccessful in resolving even the smallest of the Council's concerns. This letter clearly shows the Council still believes that granting the special exception poses a high risk to the health, safety, security or general welfare of the 10,000 people who enjoy the Henson camp every year. Earlier portions of this analysis showed how the air pollution, dust, and noise

emitted from the mining operation could pose a substantial threat to the health, safety, security or general welfare of the Smith, Brown, and Whites' and other families living in the neighbor adjoining the northwest side of the site. Again, the applicant's submittal fail to address these impacts in a comprehensive way.

- (g) **Will not, in conjunction with existing development in the area and development permitted under existing zoning, overburden existing public services and facilities, including schools, police and fire protection, medical facilities, water, sanitary sewer, public roads, storm sewers, drainage and other public improvements; and**

Applicant's Text: The proposed use, in conjunction with existing development in the area and development permitted under existing zoning, will not overburden existing public services and facilities, including schools. The proposed facility will not house new residents or cause any impact on existing public schools. The proposed use also will not generate any significant impacts on police, fire protection or medical services or facilities. No public water, sanitary sewer, storm sewer or drainage facilities are located in the vicinity of or provide service to the Site. Accordingly, the proposed use will not impact any such services or facilities. With respect to public roads, the traffic generated by the proposed use will be comparable to that which would result from a similarly sized mineral extraction operation located in the remainder in the AC zoning district or elsewhere in the County. Notably, any impacts resulting from the proposed use at this Site will be less significant than would occur elsewhere due to the Site's direct access to a major State highway, the rural nature of the area surrounding the Site and its highway access, and the adequate sight lines and highway geometry that exist along the property's road frontage. In summary, the proposed use, in conjunction with existing development and development permitted under existing zoning, will not overburden any public services, facilities or other public improvements.

CEDS Analysis: The water table drawdown caused by the proposed 70-foot deep pit could adversely affect the wells providing water to area homes and the Scout reservation. This issue was not addressed in the applicant's submittals. The suitability of MD 313 as a bicycle route may be jeopardized by the increased truck traffic, yet this impact was not addressed either.

- (h) **Meets the definitions and specific standards set forth elsewhere in this chapter for such use.**

Applicant's Text: As demonstrated by the attached site plan set prepared by Lane Engineering, LLC, the proposed use and the specific grading and improvement plans comply with all applicable definitions and standards set forth in the Zoning Ordinance.

CEDS Analysis: The project fails to comply with the prohibitions against mining within the Tidewater Buffer set forth in the:

- the *Dorchester County Critical Area Protection Program* document;
- Grading, Erosion and Sediment Control Regulation §100-14.E.5; and
- §155-38J, of the Zoning Ordinance.

The project also fails to comply with all of the required findings presented above.

WITNESSES

Generally, three types of witnesses testify in a zoning case: lay witnesses, fact witnesses, and expert witnesses. A lay witness presents their perception of how a proposal will affect their quality of life. A fact witness can testify about whether specific features or other conditions exist, but cannot offer an opinion as to whether the feature or condition causes the project to meet the technical criteria set forth in a zoning regulation or other requirement. An expert witness can testify as to facts they have observed and offer opinion as to whether these facts show that criteria has or has not been met.

In a legal proceeding, like a special exception hearing, expert witness testimony trumps that of a lay or fact witness. While I have been in proceedings where a case was won based solely on lay witness testimony, this only happens when there was no other contradictory testimony introduced. It is unlikely that the Horsey Family attorney will be caught this flat-footed.

Lay Witnesses

At this point I anticipate that a number of the neighbors to the northwest will wish to testify about how the mining operation will impact their homes and other properties. I do not believe that any can qualify as an expert witness. I have asked the neighbors who anticipate testifying to provide an outline of what they would like to say. I also anticipate that a number of the scout families will testify as well. Last Saturday I assisted the Council in mailing a postcard announcement to nearly 600 families in Dorchester, Talbot, and Wicomico counties.

Fact Witness

I assume that Mr. John Doe, of the Scout Council, will be presented as a witness by the Council's attorney regarding various facts such as the proximity of the mining operation to the ropes tower, activity fields, trails, wells, and other Scout reservation features.

I assume that Ms. Jane Smithson will speak on behalf of the Friends of Marshyhope regarding the significance of Wades Savanna and the extensive efforts the Friends has made to preserve this area.

Expert Witnesses

At this point I anticipate two expert witnesses:

James Timmins who will testify regarding how the mining operation will reduce the

water table, with emphasis on the impact on Wards Savanna and possibly the nearest shallow well serving the Henson Scout Camp. Mr. Stein is a highly qualified and widely respected soil scientist. However, there may be some difficulty in qualifying Cliff as an expert with respect to groundwater hydrology. I have requested Mr. Stein's resume' so the Friends of Marshyhope's attorney can make a judgement.

George Grant who is the Regional Ecologist for the Wildlife & Heritage Service of the Maryland Department of Natural Resources. I anticipate that Mr. Grant will utilize the water table drawdown estimates prepared by Mr. Timmins to form an opinion as to how the mining operation will impact Wades Savanna. It is my understanding that Mr. Grant believes the impact will be serious and irreversible. Mr. Grant would like to receive a summons to testify.

There is a possibility some of the neighbors to the northwest may retain a professional to testify as an expert on the impact of the mining operation on the value of their property.

Presently there are no plans (and no funds) to retain expert witnesses for the following issues: noise, air pollution, dust, traffic impacts, or barge traffic.

Summons Authority

As stated above, DNR Ecologist George Grant would like to receive a summons. Section VIII.D., of the *Dorchester County Board of Zoning Appeals Rules of Procedure*¹³, does allow the Board to issue a summons requiring witnesses to appear.

STANDING

In addition to the Friends of Marshyhope there are five families who own property northwest of the mining site who may wish to become parties to this case.

Figure 4 shows the mining site outlined with yellow in the left-center area. The property owned by the five families is just to the north and is outlined with a pink-purple line. The Friends two properties are bounded with a green line and I added two pink-purple arrows pointing to the two Friends properties.

Figure 5 provides a detailed view of the properties owned by the five families, the Horsey Family LLC property, and the proposed haul road.

Both of the Conservancy's properties are downstream of the site, but its arguable whether they are within sight, sound, or smell which I recall to be the standing test in zoning matters. The property owned by the five families is within sight, sound, or smell of the proposed mine.

Would the Friends of Marshyhope as well as the five families have standing in the special exception hearing before the Board of Appeals?

¹³ See Board of Appeals Procedures on the CEDS webpage at: <http://ceds.org/SWS.html>