

IN THE MATTER OF : BEFORE THE
CHASE LIMITED PARTNERSHIP : **HOWARD COUNTY**
 Petitioner : **BOARD OF APPEALS**
 : BA Case No. 95-58E

.....

DECISION AND ORDER

The Howard County Board of Appeals (the "Board") convened on the dates listed below to hear the petition of Chase Limited Partnership, Petitioner, for a special exception for a quarry in an M-1 (Manufacturing:Light) Zoning District, filed pursuant to Section 131.N.42 of the Howard County Zoning Regulations.

The members of the Board who were present at the hearings are as follows:

<u>Date (1996)</u>	<u>Present</u>	<u>Absent</u>
Jan. 4	All	None
Feb.8	All	None
March 21	All	None
March 26	All	None
April 9	George Layman Jerry Rushing Evelyn Tanner ¹ Donald Messenger	James Caldwell
April 11	Jerry Rushing Evelyn Tanner Donald Messenger	George Layman James Caldwell

¹Ms. Tanner left the hearing at 11:10 p.m.

April 16	George Layman Jerry Rushing Evelyn Tanner Donald Messenger	James Caldwell ²
May 23	George Layman Jerry Rushing Evelyn Tanner	Donald Messenger
May 28	George Layman Jerry Rushing Evelyn Tanner	Donald Messenger
May 30	George Layman Evelyn Tanner Donald Messenger	Jerry Rushing
June 13	George Layman Jerry Rushing Donald Messenger	Evelyn Tanner
June 27	All	None
July 23	George Layman Evelyn Tanner Donald Messenger	Jerry Rushing ³
August 1	George Layman Jerry Rushing Donald Messenger	Evelyn Tanner
August 8	All	None
August 27	All	None
September 11	All	None ⁴
October 16	All	None
October 23	All	None

²Member James Caldwell resigned from the Board on April 30, 1996, and did not participate in the decision.

³As of July 1, 1996, James Pfefferkorn replaced James Caldwell as the fifth member of the Board. Mr. Pfefferkon, however, did not participate in the hearings or decision in this case.

⁴Ms. Tanner arrived at the hearing at 8:45 p.m.; Mr. Layman left the hearing at 9:45 p.m.

In addition, the Board conducted a site visit of the subject property and of the Petitioner's quarry operation in Frederick, Maryland, on July 15, 1996, at which all Board members were present. Chairman George Layman presided at all hearings at which he was present; Vice-chairman Jerry Rushing presided at those hearings at which Mr. Layman was absent. Thomas P. Carbo, Senior Assistant County Solicitor, served as legal advisor to the Board.

The Petitioner was represented by counsel, Richard B. Talkin, Esquire. Certain Protestants were represented by counsel, David A. Carney, Esquire, Conwell F. Sapp, Esquire, and Reese and Carney, LLP. Other Protestants appointed the following spokespersons in accordance with Section 2.208(b) of the Board's Rules of Procedure: Leah Woodbury and Jim Campbell.

This case was conducted in accordance with Section 2.209 of the Board's Rules of Procedure. The Howard County Code, the Howard County Charter, the Howard County Zoning Regulations, the various technical staff reports, the Department of Planning and Zoning Technical Staff Report recommending approval dated November 17, 1995, the Planning Board Recommendation of approval dated December 6, 1995, the General Plan for Howard County, the General Plan of Highways, and the Petition and Plat submitted by the Petitioner were incorporated into the record by reference.

The Petitioner provided certification that notice of the hearing was advertised and certified that the property was posted as required by the Zoning Regulations. The Board members present indicated that they had viewed the property as required by the Zoning Regulations.

The following persons testified on behalf of the Petitioner: Kingdon Gould, Jr., John Hall, Richard J. Roddewig, James Richard Richenderfer, Louis J. Slade, Michael A. Staiano, Joseph A. Nawrocki, Jr., David K. Miller, Craig Gartzke, Aelred D. Geis, Gary Prestianni, Michael Sager, Gerald Maynor, Merle S. Green, Sr., Leonard Moore, Jr., Mark Smith, Donna Vanella, Shawn Fentress, Anthony M. Bauer, Timothy J. Schmidt, and Ross Dangel.

The following persons testified on behalf of the Protestants: Paul J. Allen, Tim Maier, Judy McCleaf, John McCord, Kevin McCleaf, Rosemary Ford, Harrison A. Glasgow, Melinda R. Hamilton, Leah Woodbury, Nancy Merkle, Thomas Mills, and Russell Olson.

In rebuttal, the following persons testified on behalf of the Petitioner: Michael A. Staiano, Gordon Mathison, Louis J. Slade, Kip Shrack, and Timothy J. Schmidt.

FINDINGS OF FACT

Based upon the evidence presented at the hearing, the Board makes the following Findings of Fact:

1. The subject property, which is located in the 6th Election District, consists of approximately 350 acres of a 546.207 acre parcel of land bounding on the north side of U.S. Route 1, the south side of I-95, the south and west side of Mission Road, and the east side of the CSX Railroad rail line in Jessup, Maryland. The property is more particularly described as Tax Map 43, Block 19, Parcel 234 and part of Parcel 235. It is also known as 8294 and 8318 Baltimore-Washington Boulevard. The property is zoned M-1 and MXD-3 (Manufacturing: Light - Mixed Use Overlay).

The site is irregularly shaped and slopes gently from the northwest toward the southeast. The site consists predominantly of undeveloped woodlands, made up primarily of mature

deciduous trees. A 30 acre clearing located in the northwestern portion of the site contains a small farm and horse pastures fronting onto Mission Road. A small area of excavation is located to the north of the farm. To the southeast of the farm and towards the center of the site is a small cemetery. A stream enters the site from under Mission Road at the northeast, meanders south generally within 200-500 feet of the eastern boundary, and exits the property to the southeast under US Route 1.

2. The subject property is surrounded by a wide variety of zoning districts and uses.

Vicinal properties include:

A. Mission Road Properties:

The property to the northwest of the subject site, across the CSX Railroad, is a vacant, wooded portion of the larger 546 acre property owned by the Petitioner, which is zoned R-SC - MXD-3. Further to the west of this area is the R-SC zoned Heritage Woods subdivision, a neighborhood developed with two-story, frame single-family detached dwellings fronting on Mission Road and on internal streets.

The properties to the northwest of the subject site which are on the east side of the railroad are zoned M-1 - MXD-3 and M-1, and are situated between Mission Road to the east and south, the railroad to the west, and I-95 to the north. These properties are improved by a one-story, single family detached dwelling, a two-story frame single-family detached dwelling, and a one-story single family detached dwelling.

To the north of the subject site across Mission Road is a small parcel zoned M-1 -

MXD-3 which is improved by a one-story, frame single-family detached dwelling. The other areas to the north from this parcel to the point where the stream flows under Mission Road, are part of the larger 546 acre property owned by the Petitioner. This area of the Petitioner's property is improved by several single-family detached dwellings.

The property to the east of the site, across Mission Road, is a residential area zoned R-SC. This neighborhood includes the Pleasant Chase subdivision, a new development with both single-family attached and detached dwellings fronting on Pleasant Chase Road and other internal roads as well as individual lots fronting directly onto Mission Road which are improved by one and two-story, single-family detached dwellings.

At the point where Mission Road turns east, there are single-family detached dwellings on the north side on R-SC zoned lots, and a one-story brick and a two-story frame single-family detached dwelling on the south side on an M-1 zoned property. To the east and southeast of the subject site at the southwestern corner of the Mission Road intersection with US 1, is an M-1 zoned property which is the site of trucking business. This property is improved by a one-story warehouse building in the center of the site, surrounded by paved truck parking areas.

B. US 1 Properties - Southeast Side:

Across US 1, from the point across from Mission Road to the southwest ending at Patuxent Range Road, are the Maple Park mobile home park on R-MH zoned property; several M-2 zoned parcels with an office building, a retail building, and

a self-storage facility; and several small M-2 lots located on the south side of Dorsey Run which are improved by single family detached dwellings. Further south along US 1 is a large R-MH zoned area, the Brentwood Manor mobile home park and two single-family detached dwellings. A large trailer storage lot and trailer rental business located at the northwest corner of the intersection of US 1 and Patuxent Range Drive, across from the southernmost area of the subject site. Further to the southeast, down Patuxent Range Drive is the Baltimore-Washington Industrial Park.

C. US 1 Properties - Northwest Side:

The subject site has frontage on US 1 at two points; a low area where the existing driveway into the site is located and the area between the Patuxent Range Drive intersection and the CSX Railroad. In between these points on the northwest side of US 1 are approximately seven M-1 zoned properties which are improved by a variety of commercial and manufacturing buildings. These buildings are all located close to the US 1 frontage.

3. U.S. Route 1, which the Petitioner proposes to use as the sole access to the site, is an intermediate arterial with four travel lanes and 50 feet of paving within a proposed 100 foot wide right-of-way. In the proximity of the site, U.S. Route 1 slopes generally downward from its intersection with U.S. Route 175 north of the property to its intersection with Maryland Route 32 on the south. The posted speed limit is 45 mph. According to data from the Howard County Department of Public Works, traffic volume on U.S. Route 1 in the vicinity of the site as of March, 1992, was 21,918 average daily trips.

4. The Petitioner proposes to operate on the site a quarry for the mining, processing, and sale of stone, sand, gravel, clay, and fill-dirt. All material mined in the operation would be crushed, screened and stockpiled on-site for delivery off-site. The Petitioner also proposes to manufacture hot-mix asphalt and ready-mix concrete as accessory processing uses. The Petitioner proposes to continue its quarrying operations for 25 years from its commencement.

According to the petition and special exception plan, the quarry "pit" itself will be located in the central and northern portion of the site, eventually covering up to 100 acres. Two primary stone crushing facilities will be situated at the south end of the quarry pit. Southwest of the quarry's edge will be located a crushing and screening facility and product stockpiles. During testimony, the Petitioner stated that all structures will not exceed 65' in height, and stockpiles will not exceed 60' in height. Additional product stockpiles will be situated along the western boundary of the site next to the existing CSX Railroad line. All of these large-scale operations will be at least 1,000 feet away from the U.S. Route 1 frontage.

The southern portion of the site, closest to U.S. Route 1, will contain several smaller operations, including, from east to west, a large sedimentation pond, an equipment maintenance facility (a permitted use), the concrete plant, the asphalt plant, a 2-acre truck parking area, and the quarry's office building and operation center (also a permitted use), with a 1.5 acre parking area. The asphalt plant and truck parking area will be located approximately 700 feet from U.S. Route 1, behind several existing commercial and manufacturing buildings (not part of the Petitioner's property) located adjacent to the road. The equipment maintenance building and concrete plant will be screened from U.S. Route 1 by a proposed landscape berm.

Access into the site will be gained from a single point at the southeast portion of the

property on U.S. Route 1. The Petitioner testified that no access would be permitted from Mission Road. The Petitioner proposes that vehicles would be allowed to enter the access point from either the southbound or northbound lanes of U.S. Route 1, although the Petitioner opined that it is likely that 80% of the trucks entering the site will do so from the southbound lane. The paved access drive would loop from the southeast entrance to a single exit at the southwest corner of the site opposite Patuxent Range Drive, a signalized intersection. Vehicles exiting the site would be permitted to turn either right or left onto U.S. Route 1, although in the Petitioner's opinion 80% of the truck traffic will likely head southbound. On the site, the loop drive would provide access to and between the maintenance facility, incoming and outgoing truck scales, the concrete and asphalt plants, and the operations center. Access to the remainder of the operation would be gained via an unpaved road extending north from the asphalt plant to the western edge of the quarry pit.

The Petitioner proposes to set back all operations a minimum of 100 feet from the special exception site boundary. Crushing, screening, loading and similar operations will be set back at least 300 feet. Along the eastern boundary of the site, the Petitioner proposes to establish a conservation easement containing approximately 40 acres of existing mature woodlands and the stream valley. The easement would serve as a buffer between the quarry pit and the residential neighborhood on the east side of Mission Road. Using surface soils extracted from the quarry, the Petitioner also proposes to erect landscape berms, planted to augment existing vegetation, along open areas along the northern and northwestern boundaries of the site. These berms would vary in height from 12 to 40 feet.

The proposed total hours of operation each day for the quarry would not exceed 11 hours

and would be conducted within the limits of from 6:00 a.m. to 6:00 p.m., Monday through Sunday. The only quarry activities on Saturdays would be limited to sales, deliveries, and repairs to equipment. The only activity on Sunday would be limited to equipment repairs. The rest of the week, these and other activities including the excavation work, the processing of stone, and the stockpiling of products would take place between 7:00 a.m. to 6:00 p.m. The Petitioner specifically declares that there will be no blasting between the hours of 6:00 p.m. and 7:00 a.m. on any day.

Approximately 400 customer trucks are expected to visit the site each day. The planned circulation pattern for these trucks is as noted above, with generally right turns into the site from US 1 at the northernmost entrance, and through the various scales and loading areas to exit with right turns onto US 1 at the exit across from Patuxent Range Road.

The total employees for the principal quarry operations is estimated to range from 45 to 68 persons. These employees would have responsibilities in plant labor and maintenance, operations superintendence, heavy equipment operations, dispatch and scales operations, clerical work and site security. The Petitioner estimates that an additional 70 employees would be necessary to operate the accessory asphalt and concrete plants if they are approved and constructed.

In addition to the fixed equipment such as the crushing, screening and stacking operations, approximately 50 operational vehicles will be used on the site. These vehicles will include such equipment as front end loaders, bulldozers, self-loading pans, compactors, graders, water trucks, service trucks, and off-road trucks for hauling quarry materials.

According to the Petitioner, blasting within the mining area would be conducted in the

afternoons approximately two times each week. The Petitioner states that the total period for blasting would be less than ten seconds each month. All blasts are sub-surface explosions and only very low-frequency sound waves would be detectable above-ground. All ground vibrations are monitored with seismographs established at the perimeter of the site. The Petitioner has stated that at similar quarry sites there is usually no significant seismic reading at the perimeter during blasting.

The Petitioner proposes to establish procedures for the reporting and investigation of vibration damage to buildings in the vicinity. Such procedures could include the establishment of an escrow fund available for the compensation of any damages attributable to the quarry operations, as evaluated and determined by an independent arbitrator.

To control dust created by the plant operations the Petitioner will employ a water spray and misting system at all product transfer points. A dust collection system as approved by the Maryland Department of the Environment will be within the enclosed areas of the plant facilities. All product stockpiles will be sprayed with water to control dust. The principal roads and parking areas within the site will be paved and will be swept and watered by trucks. The unpaved roads to and within the mining area will be treated with water and/or crushed stone.

Stormwater management and sedimentation ponds, also used for water storage for processing and dust control, are proposed for the southeastern area of the site near the northernmost US 1 entrance. Runoff from the operations areas would be directed into these ponds for water quality and quantity controls. Sediment collecting in these ponds can be removed as necessary. The quarry itself eventually will become the principal collector of water on the site as its depth is increased; any runoff which cannot be diverted to the quarry would be

treated by the ponds.

Noise produced by the use would be attenuated by the use of berms, by the preserved wooded areas and topography, and by the distance the various activities would be separated from the site perimeter. The existing wells in the vicinity will be monitored during the period the use is in operation. The Petitioner states that in the event any of such existing wells are affected by the operations, that such problems will either be corrected or alternate improvements will be constructed to provide new water supplies.

The Petitioner does not provide specific information concerning proposed exterior lighting on the site. With the proposed hours of operation ending at 6:00 p.m. each day, however, it is anticipated that any exterior lighting that would be on the site primarily will be limited to security lighting in the vicinity of the various buildings and equipment facilities.

A chainlink fence six feet in height will be constructed to be no closer than 20 feet from the edge of the quarry excavation area. The fence will be extended as needed as this excavation area expands. Barbed-wire or razor-wire would be added to the top of this fence to discourage persons from scaling the fence. In addition to this deterrent to trespassers, the Petitioner has stated that thorny plants also will be used in the perimeter landscape buffers and berms.

The Petitioner proposes that security personnel would be on duty on the site 24 hours each day. The entire fence perimeter could be patrolled from the inside of the excavation limits, at the top of the quarry. The Petitioner has stated that a safety program would be offered through the schools for the nearby communities to educate children living in the vicinity about the dangers of trespassing onto a quarry operation.

At the end of the period of operations, the Petitioner would follow the Reclamation Plan

submitted as part of this petition. This plan includes the intended treatment of the quarry excavation area, actions to rehabilitate top soil and revegetate areas of the site, regrading and soil stabilization, control of drainage, removal of certain constructed facilities, and the maintenance and use of access roads into the site.

The quarry eventually would encompass approximately 100 acres of the 350 acre special exception site and would have a final depth of approximately 200 feet. The Petitioner proposes that at the end of the use the quarry will become a lake. Water drainage on the site would be diverted into the quarry wherever possible during the mining operations according to the Petitioner; over time this excavation would fill with water. The edges of this lake would be tapered in slope to provide a more gradual descent in depth rather than a sheer wall. A buffer area would be established around the perimeter of this lake. The security fence constructed to surround the quarry would remain. The Petitioner states that the lake area would be granted as an environmental easement to the Howard County Conservancy and/or the Maryland Environmental Trust.

Topsoil conserved within the landscaped berms would be used for the partial revegetation of the site following the completion of the mining operations. Paved areas, building areas, the underwater quarry area, and other appropriate areas will not be revegetated. The Petitioner estimates that sufficient topsoil will be available in the berm stockpiles. If it is not sufficient, additional soil will be brought into the site.

Site regrading is proposed so that final slopes are not steeper than a 33 percent slope and are not flatter than a 2 percent slope. Any areas of erosion would be filled and the soil stabilized. The area where the regrading would primarily occur is the area between the southwestern edge of

the quarry and the railroad to the west.

As depicted on the Reclamation Plan, the structures for the crushing and screening operations, the concrete plant, the asphalt plant, the product stacking and loading facilities, and all product stockpiles would be removed. The equipment maintenance building and the operations center office building are both depicted as remaining on the site.

The access roads constructed in the southern portion of the site would remain following the completion of the quarry operations. The Petitioner states that these roads are intended to be used as part of a future development of the property.

5. Mr. Gould, the general partner of the Petitioner, testified that the property is a source of "Gabbro" diabase rock, a mineral used in road construction. The Petitioner decided to mine the rock upon the urging of the State Department of Natural Resources and after consultations with State agencies, environmental groups, and community groups. As a means of mitigating the adverse effects of the quarry operation on the surrounding properties, and in order to provide a community enhancement to the area, the Petitioner has agreed, among other things, to donate approximately 7 acres of land near the site on Mission Road to the Ridgely's Run Community Association for use as a community center. The Petitioner will construct on the 7 acres, at its own expense, (i) a community center building of approximately 5,000 square feet with parking, (ii) an exterior all-purpose basketball court, (iii) two tennis courts with nets and fencing, and (iv) grading for a little league baseball diamond and provide a little league baseball backstop. Construction will begin prior to commencement of quarry operations, and the Petitioner will diligently pursue completion of construction. In addition, during each year of quarry operation, the Petitioner will donate to the Ridgely's Run Community Association five cents (5¢) per ton o

marketable stone product shipped from the project operations, with a minimum donation of \$50,000.00 per year. The Petitioner commits to operating the quarry for only 25 years, even if product is left to be mined.

6. Mr. Hall, a professional planner and landscape architect, stated that because of the height of the proposed berms and the location of the structures and operations on the site, the structures and operations will not be visible from Mission Road or Route 1. Also, because of the size of the site and the fact that it is part of a larger site owned by the Petitioner, and because of the setbacks, buffering and landscaping proposed by the Petitioner, the quarry will not have an adverse effect on vicinal properties, nor will it hinder or discourage the development or use of adjacent land or structures. He opined that, due to its size and opportunity for adequate buffering, the site is superior to any other M-1 zoned property in the area.

7. Mr. Roddewig, a real estate analyst and appraiser, opined that the proposed use will not have an adverse impact on residential property values in the area; rather, it may enhance property values. He presented evidence of his studies of three operating quarries in Maryland as well as several others throughout the United States. At these quarries, houses located closer to the quarry often had higher values, and appreciated at greater rates, than those further away. New developments of higher-priced homes are often located adjacent to the quarry pits. He concluded that a well-planned quarry may be seen as an amenity in the market which, rather than hindering development, may attract it.

8. Mr. Richenderfer, a hydrogeologist, testified concerning the effect of the mining operation on groundwater in the area. He stated that the amount of groundwater that will infiltrate into the quarry will be minimal and will only affect an area of 300-400 feet around the

pit. He stated that because gabbro is a hard igneous rock with few cracks, water migrates slowly through it. The groundwater at the site is located 50' below grade, and is not likely to be connected to the stream which runs through the site. No wells are within 370' of the pit, and only one well is within 500'. No contaminants are expected to be pumped from the pit, and rock particles will be filtered out in the sedimentation ponds. He opined that there is no potential for sink holes in the area due to the mining operation. He also opined that the proposed asphalt and concrete plants will not have an effect on the groundwater or streams in the area.

9. Mr. Slade, a traffic engineer, gave his opinion that the proposed use will not cause a traffic safety problem on Route 1 and that ingress and egress to the site will be safe. He stated that the State Highway Administration may require acceleration and deceleration lanes at the site, which the Petitioner is prepared to provide. The SHA has indicated that the paving for U.S. Route 1 is adequate to handle the expected number of trucks using the site; no other structural elements are necessary. He stated that Route 1 presently handles predominantly commercial traffic. The grade of U.S. 1 near the site is 4% sloping south, which Mr. Slade characterized as not steep. Traffic in the area of the site is less heavy than to the north, near the intersection of Route 175, or to the south, near the intersection of Route 32. He opined that trucks using the property will be prone to come from Route 175 on the north and leave the area via Route 32 on the south. He stated that a condition that the entrance to the site permit right turn-ins only, and that the exit permit right turn-outs only, would provide adequate access to the major interstates and not disrupt the quarry operations.

Sight distance at the access points is 1500 feet, well above the required 720-foot sight distance. There is no local pedestrian traffic in the area of the access points to the site. Based

upon the expected production of the quarry, the operation will generate approximately 400 truckloads per day, or 800 truck trips per day, and 620 employee trips per day. This total of 1420 trips per day is well below what could be expected for other potential matter-of-right uses of the site. Mr. Slade stated that the type of truck expected to be used on the site will be 20-ton dump trucks, approximately 35-38' in length and 13' high. One or two large tank trucks may also use the site to access the asphalt plant.

10. Mr. Staiano, a professional engineer and noise consultant, testified concerning his analysis of the noise levels that can be expected at the quarry operation. He stated that State regulations would prohibit noise levels of over 65 dBA at the site during daytime hours. Based upon the types of equipment to be used, the distances from the operations to vicinal properties, and the topography of the site (but not taking into account the planned berms or landscaping), he concluded that noise levels at their worst would be between 52 and 61 dBA, below the State standard. He noted that while any quarry operation will create noise, the sound levels at this site will be attenuated by the large size of the site and masked by the ambient noise of Route 1 to the south and I-95 to the north. He opined that the additional truck traffic generated by the proposed use will increase traffic noise on Route 1 in the area of the property only 1 or 2 dBA, barely perceptible levels.

11. Mr. Nawrocki, a licensed explosives and blasting specialist, testified that the blasting of the quarry rock will follow modern, highly accurate and safe blasting techniques and is highly regulated by the State Fire Marshal and the Department of Natural Resources. Blasting will occur twice a week. Pursuant to State regulations, seismographs will be set up at the nearest residences and reports submitted for each blast. Prior to any blast, the Fire Marshall will be notified and a

warning siren sounded. The Petitioner expects to conduct its blasting at 50% of the maximum ground vibration levels permitted by State regulation.

12. Mr. Miller, a geologist and vibration specialist, opined that the blasting operation at the site will not damage residential structures. He stated that the type of rock to be blasted, the design of the blasts, and the distance to vicinal properties will control vibrations and reduce the risk of damage. Expected vibrations will be less than those created by normal daily living. The closest residence to the blast site is within 300 feet; 24 others are within 1,000 feet. All 25 of these residences, as well as 12 others in the Heritage Woods subdivision, will be offered pre-blast surveys before test blasting is done.

13. Mr. Gartzke, the design engineer for the quarry operation, testified that the stone crushing, screening and stockpiling operations will comply with Maryland Department of the Environment regulations which prohibit visible emissions of dust. All stone crushers, screening facilities, and conveyors will be enclosed. In addition, water suppression and dry dust collectors will be used. Stockpiles will be wetted with a sprinkler system. He stated that the proposed facility will exceed the dust suppression methods used by most quarry operations. He also stated that gabbro rock creates less dust than softer rock such as limestone.

14. Dr. Geis, a wildlife biologist, opined that the Petitioner's proposed land use was superior to the matter-of-right alternatives in that it will better support the wildlife in the area and will provide a future recreational lake for County residents.

15. Professor Bauer, a landscape architect and professor at Michigan State University, testified that he has visited over 200 mine and quarry sites and studied surface mine reclamation issues. He stated that quarries can be developed in residential areas, and are often regarded as

beneficial. He opined that this particular site is well-suited for a quarry operation, because of its size, the amount of buffer area, and the access to two major roadway interchanges. He stated that the amount of ground cover around the quarry will assist in controlling dust, by reducing wind and providing humidity.

16. Timothy J. Schmidt, director of land resources for the Petitioner, testified concerning the myriad of state and federal regulations which the Petitioner must satisfy in order to develop and operate the proposed quarry. He estimated the market area for the quarried stone to be 35 miles in radius from the site. He amended the petition to provide that all structures will not exceed 65' in height, and stockpiles will not exceed 60' in height. All operations will be setback at least 300' from property lines, and sediment ponds will be setback between 100-300'. The loop road will be approximately 600-700' long and paved with asphalt. Internal speed limits will be posted. Berms will be built before any stone is quarried, and will be between 12-40' high. Twenty-four hour security will be provided and a chain link fence, not closer than 20' from the edge of the pit, will be erected around the quarry. No hazardous materials or blasting materials will be stored on site. Only water will be discharged into streams. Only minimal tree removal, in order to get equipment in and out of the site, will occur. He estimated that the proposed asphalt plant would account for 5% of the trucks on site. If the concrete plant is built, it would reduce the number of trucks coming onto the site by roughly 25%. Mr. Schmidt reiterated that the Petitioner will limit the term of the quarrying operation to 25 years from its commencement.

17. In opposition to the petition, Mr. Allen stated that he objected to the proposed height of the berms. He stated that he owns property in the vicinity of the site and is concerned that the berms will reduce its value. He noted that his property has been for sale for 12 years. He also

stated that he fears the quarry will cause sinkholes in the area.

18. Mrs. McCleaf testified that she lives in the Heritage Woods neighborhood. She stated that she is concerned about the traffic hazard posed by loaded dump trucks exiting the site and traveling toward the Guilford Road intersection. She stated that she studied the Howard County Comprehensive Transportation Plan, the General Plan and other studies concerning traffic on U.S. Route 1. Based upon her research, she found that the Route 1 corridor in the area of the site had the highest accident severity index of all such roads in Howard County as of 1992. The intersection of Guilford Road and Route 1, south of the site, suffered the 3rd most accidents in the county in 1991-92. On cross-examination, she conceded that there had been improvements made to the intersection of Route 1 and Guilford Road since 1992, and had no traffic figures since then. She also testified that she studied stopping distances for vehicles and learned that it takes 500-600 feet for a 20-ton truck to come to a stop at the posted speed limit. She stated that this calculation did not take into account the grade of Route 1 between the site and Guilford Road. She agreed that the distance between the proposed site exit and Guilford Road is approximately 2600 feet.

19. Mr. McCord, an engineering scientist, testified that the noise levels predicted by the Petitioner, as high as 61 dBA, are objectionable. He said that he measured the noise levels on Route I-95 and obtained a reading of between 51 and 60 dB. In response to cross-examination, he stated that as traffic and noise levels have increased on Route I-95, his property values have not decreased. He asserted that loudness is a subjective judgment, and that the noise of construction equipment is more objectionable than the hum of road traffic.

20. Mr. McCleaf testified that property values in the Heritage Woods neighborhood

decreased 5.5% in 1994-95. On cross-examination, he stated that he did not know what caused the reduction.

21. Mrs. Ford presented testimony and photographs of the existing condition of the site. She stated that she is concerned about the traffic hazard posed by heavy trucks approaching the Guilford Road intersection with Route 1, the noise that may be caused by the crushing facility, and the possibility of dust emanating from the site.

22. Mr. Glasgow testified that he is a naturalist who has studied wetlands issues. Based upon photographs and maps of the site, he stated that some wetlands may exist on the property and southeast of the site. He stated that he is concerned that the quarry may interrupt stream flow and add silt to the streams on-site, thus effecting wetlands off-site. He also stated his concern that ground water pumped out of the quarry pit may reduce water flow of the on-site streams. On cross-examination, he stated that he has had no formal training or certification in wetland delineation, and had not personally viewed the site.

23. Ms. Woodbury, who lives on Mission Road, testified that she recently visited several quarries in Maryland. She stated that, based upon her observation of homes located near quarry sites, many different factors may affect their property values, including views, proximity to roadways, housing types and amenities. She concluded that, contrary to Mr. Roddewig's conclusions, it is not possible to determine if location near a quarry benefits property values. She also testified that persons living in homes near one quarry could feel the vibration of quarry blasting, that dust was visible on roads near another quarry, and that dust plumes were seen rising off the rock piles at another quarry. She further testified that because of the presence of high intensity uses in the area, such as prisons, I-95, and industrial uses on Route 1, she is concerned

that the cumulative effect of adding a quarry to the region will decrease property values.

24. Ms. Merkle, a meteorologist, testified concerning the emissions of dust that can be expected from the proposed use. She stated that all dust is not visible, and that it is impossible to eliminate all dust emissions through watering. Dust may be harmful to humans, trees and streams, and can travel up to one mile away. She stated that the adverse impact of dust is greater in a residential area because more people would be effected. On cross-examination, Ms. Merkle conceded that she did not know how much dust would escape the watering operation proposed by the Petitioner. She also conceded that there are many common sources of invisible dust, including walking, driving, etc. She testified that she is not familiar with other M-1 zones in the County, and could not state whether the effect of dust at this location would be greater than elsewhere in the zone.

25. Mr. Mills, a geologist for a groundwater consulting firm, testified concerning the effect of the quarry operation on the water resources in the area. He stated that, in his opinion, the transmissivity of the rock at the quarry site is much higher than Mr. Richenderffer had assumed, and that quarry will draw groundwater from an area of 1100-1200' around the pit, decreasing the yield of wells in the area. He opined that, at the end of mining operations and in order to fill the quarry to create a lake, the flow of the streams in the Dorsey Run would be decreased. Any wetlands located east of the site would also be reduced. He predicted that, based upon his calculations, the Dorsey Run would dry up during "low flow" drought periods, which occur an average of every 8 years. He calculated that it would take 41 years to fill the pit to create the lake. He stated that there are 3 other M-1 sites that could support the project - at Route 100 and I-95, at the Troy Hill golf course area, and at the Gateway office park area. He also

testified that there is a possibility of asbestos content in the rock in the vicinity of the quarry, which could be released as asbestos dust in crushing operations.

On cross-examination, Mr. Mills testified that in making his calculations of the "dewatering" effect of the proposed quarry, he used drainage data from the Anacostia River Basin from a 1971 report. He estimated that the current "low flow" periods reduce the stream levels to 72,000 gallons per day. He conceded that other sources of groundwater will reduce the effect on wetlands if the streams dry up as he predicted. With regard to the other M-1 sites he identified, he stated that the area of the "Blue Stream" development at Routes 100 and I-95 appeared to be less residential than the subject site. Concerning the possible presence of asbestos, he conceded that the Howard County Geological Survey gave no indication of the presence of asbestos in rock in the area. He could not state with reasonable probability that asbestos is present at the site.

26. In rebuttal of Mr. Mills' testimony, Mr. Mathison, a specialist in groundwater hydrology, disagreed with the use of 1971 drainage data from the Anacostia River Basin. Mr. Mathison opined that the Dorsey Run drainage basin, of which the subject property is a part, more closely reflects the geology and scale of the area. Using 1983 data from the Dorsey Run basin, Mr. Mathison found that the low flow for the stream would be 127,000 gallons per day, and that the low flow would occur once every 20 years. He also testified that he personally took actual stream flow measurements from the stream on site in August and September of 1996, which are typical low flow periods, and found stream flows of approximately 500,000 gallons per day. He calculated that, based on these measurements, it will take only 11.5 years to fill the quarry pit to create the proposed lake. He opined that, given the healthy stream flow and the fact

that any off-site wetlands are likely fed by several sources other than the stream, the impact of the quarry on off-site wetlands will be insignificant.

27. Mr. Shrack, a land planner, testified on rebuttal concerning the 3 other M-1 properties cited by the Protestants as more appropriate for the quarry use. With regard to the Blue Stream property, he noted that a portion of it was recently re-zoned for residential use, leaving 54 acres of M-1 property. The Deep Run bisects the property, which is adjacent to a 140-unit mobile home park and 671 proposed residential dwelling units. He testified that the Gateway site is either rezoned or entirely developed. Two hundred units of high-density residential units are under construction near the site. Regarding the Troy Hill property, he stated that a 40-acre portion of it had been rezoned to B-2 commercial zoning. The remaining 180 acre property is currently under development. He also noted that over 1400 residential dwelling units are located close to the Troy Hill site.

28. Mr. Schmidt also testified in rebuttal that: (a) approximately 6-10 tractor-trailers are expected to come onto the quarry site during operations, and (b) no excavation or moving of dirt would occur before 7:00 a.m.

CONCLUSIONS OF LAW

Based upon the foregoing Findings of Fact, the Board concludes as follows:

A. General Criteria for Special Exceptions (Section 131.B).

1. General Plan: The Howard County General Plan designates the area in which the property is located as "Mixed Use," which is characterized as an area including employment, medium or high density residential and some commercial land uses. The property is currently zoned M-1, which permits a mix of manufacturing, warehousing, and business uses, with the

potential for a future MXD-3 overlay designation, which would enable the property to be developed as a mixed use site. The General Plan also identifies the area of the site as one containing mineral resources which could provide valuable raw materials for the construction industry. The Plan recommends mining of these areas provided the mining operations meet restrictions designed to protect the environment and the surrounding communities, which restrictions are "currently incorporated in State permitting procedures and the County's zoning regulations" (1990 Howard County General Plan, Chapter 6, pg 186).

The proposed excavation operation will encompass at its maximum extent less than one-third of the entire special exception site, and will be located in the northern portion of the site. The excavation operation, which is a moderate intensity use for an M-1 site, will be well buffered and separated from the vicinal residential properties by landscaping, berms and distance. The proposed stone-crushing, stockpiling, and manufacturing uses will be confined to the southern portion of the site, near Route 1 and the other high-intensity commercial and industrial uses in the area. These, too, will be buffered by berms and landscaping. Access will be allowed only from Route 1, a roadway already used heavily by commercial traffic, and not from the residentially-oriented Mission Road.

While the quarrying and manufacturing operations are perhaps more intense than the uses contemplated by the General Plan for a "Mixed Use" area, the Board finds it particularly significant that these operations will be conducted only for a period of 25 years. After this time, the excavated area will be transformed into a recreational lake. In addition, the Petitioner has agreed to create a community center to serve the residential neighborhoods bisected by the quarry operation. These future community-oriented uses are compatible with the Mixed Use

designation anticipated by the General Plan. What's more, the General Plan's policy in favor of developing the region's important mineral resources will be met until a mixed use development can be implemented. Accordingly, the location and size of the use, the nature and intensity of the operation, the size of the site in relation to the use, and the location of the site with respect to streets giving access to the site are such that the use will be in harmony with the land uses and policies indicated in the General Plan for the district in which it is located, as required by Section 131.B.1 of the Zoning Regulations.

2. Particular Adverse Effect: Section 131.B.2 of the Zoning Regulations requires the Board to find that the proposed use will not "adversely affect vicinal properties." Virtually every human activity, however, has the potential for adverse impact. Zoning recognizes this fact and, when concerned with special exceptions, accepts some level of such impact in light of the beneficial purposes the zoning body has determined to be inherent in the use. The modern seminal case on special exceptions, Schultz v. Pritz, 291 Md. 1, 432 A.2d 1319 (1981), establishes the standard for resolving special exception issues of adverse impact. Schultz states that:

[T]he appropriate standard to be used in determining whether a requested special exception use would have an adverse effect and, therefore, should be denied is whether there are facts and circumstances that show that 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. Id. at 22-23, 432 A.2d 1319 (emphasis added).

Thus, the question in the matter before the Board is not whether a quarry operation has adverse effects in an M-1 zone. The proper question is whether those adverse effects are greater at the proposed site than they would generally be elsewhere within other M-1 districts of the

County. While the Protestants' concerns about decreased property values, noise, dust, vibration, and environmental protection are understandable, no evidence was placed before the Board sufficiently demonstrating any adverse effects unique or different than those ordinarily associated with the proposed use in the M-1 District.

Some Protestants expressed fears that the presence of a quarry near their homes would decrease their property values. They produced no evidence, however, that such a result will occur. In fact, Ms. Woodbury conceded that it was not possible to determine if location near a quarry affects property values. Other Protestants expressed concerns about the potential for dust emanating from the site, blast vibrations disrupting their homes, and offensive noises disturbing their neighborhoods; the testimony presented by the Protestants on these issues, however, amounted only to unsupported opinions and conclusions. Unsupported conclusions or fears of witnesses to the effect that a proposed use of property will or will not result in harm amount to nothing more than vague and general expressions of opinion which are lacking in probative value. Anderson v. Sawyer, 23 Md.App. 612, 329 A.2d 716 (1974). Even if accepted as fact, however, the Protestants' testimony would only tend to show the adverse effects that are inherent in a quarry use; no testimony was presented to show that such adverse effects would be unique or different than those ordinarily associated with the use in the M-1 zone.

With regard to the environmental impact of the quarry use on vicinal properties, Mr. Mills presented his scientific data and analysis to show that during and after the quarry operation the groundwater and streams around the excavation would be reduced, affecting any wetlands in the vicinity of the site. He did not, however, show that there are in fact any wetlands in the vicinity of the site, nor did any other witness. Moreover, much of his testimony was contradicted

by Mr. Mathison, who showed that the reduction in drainage and stream flows would be much less severe than that suggested by Mr. Mills. Significantly, Mr. Mathison's calculations were based upon actual stream flow measurements taken at the site. In considering the relative weight of the testimony, the Board finds that even if wetlands exist off-site, the impact of the quarry is likely to be insignificant.

The Protestants attempt to meet the Schultz standard and distinguish the subject site by asserting that a quarry use would have less impact at any one of three other M-1 zoned properties in the area: the Blue Stream site, the Troy Hill site or the Gateway site. The weight of the evidence, however, is contrary to this assertion. All three sites have a significant amount of residential development in the vicinity; and the Blue Stream property is bisected by a major tributary. No evidence was adduced by the Protestants as to whether or not any wetlands existed in the vicinity of any of these sites. While there is some evidence that truck access and therefore traffic safety may be better achieved at these sites, the Board has determined that, with appropriate conditions, the adverse effect on traffic safety can be mitigated at the subject site to acceptable levels (see Section A.4, Parking and Drives, *infra*).

The Petitioner, on the other hand, has met its burden by presenting sufficient evidence establishing that this proposed use will not adversely affect vicinal properties to an extent greater than elsewhere in the M-1 district. The proposed quarry operations will be set back a significant distance from vicinal residential properties, with extensive buffering through the use of landscaping and berms, thereby attenuating the effects of any noise, dust, or vibrations. The hours of excavation operations would be limited to weekdays. Modern precision blasting techniques would be used, and would occur no more than 10 seconds per month. State-of-the art

dust containment equipment and processes would be employed. Twenty-four hour security will be provide and the quarry pit will be fenced. Trucks will not be permitted to use Mission Road. Provided that the Petitioner complies with the conditions enumerated herein by the Board, then, the proposed use will not adversely affect vicinal properties, in accordance with Section 131.B.2 of the Regulations.

3. Structures and Landscaping: The stone crushing and screening facilities will be situated at the south end of the quarry pit, at least 1,000 feet away from the U.S. Route 1 frontage. The southern portion of the site, closest to U.S. Route 1, will contain the equipment maintenance facility, the concrete plant, the asphalt plant, and the quarry's office building and operation center. The asphalt plant will be located approximately 700 feet from U.S. Route 1, behind several existing commercial and manufacturing buildings (not part of the Petitioner's property) located adjacent to the road. The equipment maintenance building and concrete plant will be screened from U.S. Route 1 by a proposed landscape berm. All structures will not exceed 65' in height. The 6-foot fence around the quarry pit will be set back a minimum of 100 feet from boundary lines.

Along the eastern boundary of the site, the Petitioner proposes to establish a conservation easement containing approximately 40 acres of existing mature woodlands and the stream valley. The easement would serve as a buffer between the quarry pit and the residential neighborhood on the east side of Mission Road. Using surface soils extracted from the quarry, the Petitioner also proposes to erect landscape berms, planted to augment existing vegetation, along open areas along the northern and northwestern boundaries of the site. These berms would vary in height from 12 to 40 feet.

The location, nature and height of the proposed structures and fences, and the nature and extent of the landscaping will therefore be such that the use will not hinder or discourage the use or development of the adjacent land and structures, in compliance with Section 131.B.3 of the Regulations.

4. Parking and Drives: While the Petitioner does not propose a specific number of parking spaces, the petition provides for a 2-acre truck parking area and a 1.5 acre parking area next to the operations center, which are of adequate size for the intended use. These parking areas will be setback at least 300 feet from Route 1 and suitably screened by berms or existing buildings, in accordance with Section 131.B.4.

As proposed, access into the site will be gained from a single point at the southeast portion of the property on U.S. Route 1. No access will be permitted from Mission Road. The Petitioner proposes to permit vehicles to enter the access point from either the southbound or northbound lanes of U.S. Route 1, although the Petitioner opined that it is likely that 80% of the trucks entering the site will do so from the southbound lane. The paved access drive would loop from the southeast entrance to a single exit at the southwest corner of the site opposite Patuxent Range Drive, a signalized intersection. Vehicles exiting the site would be permitted to turn either right or left onto U.S. Route 1, although in the Petitioner's opinion 80% of the truck traffic will likely head southbound.

The testimony before the Board established that there is a high traffic volume on U.S. Route 1 in the vicinity of the site, including a high proportion of truck traffic; a high number of access points and intersections along Route 1; a relatively steep grade of the Route 1 roadway in front of the site; and a relatively high speed limit on Route 1 in the vicinity of the site. These

conditions will make it difficult and unsafe for trucks using the site to turn into the site from northbound U.S. Route 1; to decelerate from southbound Route 1 to enter the site; and to accelerate while exiting the site onto southbound Route 1. Because of these unique conditions for public road access peculiar to the site, the introduction of the type of heavy truck traffic produced by a quarry will therefore create a traffic hazard that is above and beyond that ordinarily associated with a quarry use in an M-1 zone.⁵ Therefore, the Board finds that the ingress and egress drives, as proposed by the Petitioner, will not be laid out so as to achieve maximum safety. If, however, the northern entrance to the site is restricted to right-turns only from southbound Route 1, and a deceleration lane installed; ingress is permitted at the signalized southern intersection at Patuxent Range Drive; an acceleration lane is installed for southbound traffic exiting the southern entrance; and the posted speed limit on U.S. Route 1 between Route 175 and Route 32 is reduced to no more than 40 miles per hour, then the Board finds that the unique adverse impacts on traffic safety posed by the site will be sufficiently mitigated so that the ingress and egress drives will achieve maximum safety, as required by Section 131.B.4.

5. Other Uses on Site: The special exception use will be combined only with the permitted uses of the quarry's office building and operation center and equipment maintenance facility. These uses constitute a very small portion of the uses of the 350 acre site; are conducted entirely indoors; are located in the southern portion of the site near Route 1 and away from any residential properties; and will be setback at least 300 feet and adequately screened by berms or

⁵The Petitioner argues that the proposed quarry use will not have an adverse impact because it will generate less truck traffic than would be generated if the site were developed as a permitted use under the M-1 designation. According to Schultz, however, the Board may not consider the adverse effects produced by permitted uses; rather, the Board must compare the adverse impact created by this use at this particular site to that which is "inherent" or ordinarily associated with a quarry use in an M-1 zone. Schultz, at pp. 1330-1331.

other buildings. Consequently, the overall intensity and scale of uses on the site is appropriate given the adequacy of proposed buffers and setbacks and the land uses indicated in the General Plan for the site and surrounding properties, as required by Section 131.B.5.

B. Specific Criteria for Quarries (Section 131.N.42).

1. As a continuing condition to the grant of this special exception, the Board shall require that all applicable local, State and Federal laws, regulations or permitting requirements shall be adhered to, in accordance with Section 131.N.42.a of the Zoning Regulations.

2. Under Section 131.N.42.b, accessory processing uses such as concrete manufacture may be permitted if approved by the Board. The Petitioner has proposed an accessory hot-mix asphalt plant and an accessory ready-mix concrete plant, to be located in the southern portion of the site near Route 1 and along the loop access road. These facilities will be screened from Route 1 by existing buildings or landscape berms. According to the testimony, these operations will not significantly increase the truck traffic using the site; in fact, the existence of the concrete plant may actually reduce the truck traffic. The testimony also indicated that these operations will not significantly impact the streams and groundwater in the area. After 25 years of operation, the Petitioner will remove the asphalt and concrete plants. Consequently, the Board finds that the proposed asphalt and concrete plant will not adversely affect vicinal properties, and therefore approves them as accessory uses.

3. The Petitioner has proposed a 100-foot setback area around the perimeter of the site, which will not be excavated. In those areas lacking in existing vegetation or topographic conditions sufficient to provide adequate buffering, the Petitioner proposes to install landscape berms planted with landscaping. In accordance with Section 131.N.42.c, then, the peripheral

area shall be retained in its natural topographic condition, undisturbed by excavation of mining, 100 feet in width; and the setback area shall not be used for any purpose except planting, fencing, and roads for ingress and egress.

4. Section 131.N.42.d permits the Board to limit the height of structures and any man-made land forms. In accordance with the testimony, any structures may not exceed 65' in height; stockpiles may not exceed 60' in height; and landscape berms may not exceed 40' in height.

5. The Petitioner's proposed locations for the crushing and screening, facilities, the asphalt plant, the concrete plant, and the stacking and loading operations are all at least 300 feet from property lines. Therefore, the equipment for washing, sorting, crushing, grinding, loading, unloading, spreading, weighing, screening, sizing or similar operations shall not be located within 300 feet of a property line, as required by Section 131.N.42.e. The Petitioner proposes to locate a sedimentation pond 100 feet from the property line fronting on U.S. Route 1 in order to feed the pond with water flowing from the stream located nearby. The pond is located in the area of the property predominated by manufacturing and industrial use; no residential uses are nearby. A berm will be erected south of the pond. The Board therefore finds that the Petitioner has demonstrated the topographic necessity of locating the pond 100 feet from the property line and that sufficient safeguards will be provided for the protection of neighboring residents and uses.

6. The quarrying and manufacturing operations (except for a sediment pond) will be set back a minimum of 300 feet from all boundary lines, and in many instances a much greater distance. The manufacturing operations are located in the southern portion of the site, well separated from residential properties. In addition, the excavation area will be completely fenced, and the Petitioner will provide 24 hour security.

The blasting operations will take place no more than 10 seconds per month, twice per week. Blasting of the quarry rock will follow modern, highly accurate and safe blasting techniques and is highly regulated by the State Fire Marshal and the Department of Natural Resources. Pursuant to State regulations, seismographs will be set up at the nearest residences and reports submitted for each blast. Prior to any blast, the Fire Marshall will be notified and a warning siren sounded.

Measures will be taken for controlling dust, including water suppression, enclosures, and dry dust collectors. All operations will comply with State regulations which prohibit visible emissions of dust. Noise levels will not exceed State standards. No hazardous materials or blasting materials will be stored on site. No contaminants will be discharged into streams. Only minimal tree removal, in order to get equipment in and out of the site, will occur. The impact of the quarry on off-site wetlands, if any, will be minimal.

The paving for U.S. Route 1 is adequate to handle the expected number of trucks using the site. Provided that the northern entrance is restricted to right-turn-ins only, acceleration and deceleration lanes are installed, and the posted speed limit on U.S. Route 1 between Route 175 and Route 32 is reduced to no more than 40 miles per hour, the quarry operation will not pose a traffic hazard.

Consequently, all operations shall be conducted in a safe manner with respect to the likelihood of hazard to persons, physical or environmental damage to lands and improvements and damage to any street, bridge or public right-of-way as a result of the development or operation of the quarry, in accordance with Section 131.N.42.f.

7. The Petitioner proposes to retain existing vegetation along Mission Road, Route 1

and all property lines to the greatest extent possible. Only minimal tree removal, in order to get equipment in and out of the site, will occur. In those areas lacking in existing vegetation or topographic conditions sufficient to provide adequate buffering, the Petitioner proposes to install landscape berms planted with landscaping. Provide that the Petitioner replaces trees removed for construction of berms with adequate landscaping reforestation, and seeding or sodding of berms, then, the petition complies with Section 131.N.42.g, which requires that existing trees and ground cover along public road frontage and lot lines shall be preserved, maintained and supplemented by selective cutting, transplanting, and addition of new trees, shrubs and ground cover.

8. The Petitioner proposes to use the quarry in part for collecting drainage, which water will be used for production purposes. Therefore, the excavated area shall be maintained thoroughly drained, except for draining and ponding areas which are used for production, as required by Section 131.N.42.h.

9. The loop driveway in the southern portion of the site will be paved with asphalt and swept and watered by trucks. The unpaved road to and within the mining area will be treated with water and/or crushed stone. Therefore, all driveways serving the facility shall be treated or surfaced as necessary to control dust, in accordance with Section 131.N.42.i.

10. Section 131.N.42.j requires the Board to limit the permit to operate the quarry to a specific expiration date. As a condition of its approval, the Board shall limit the special exception to a period of 25 years from the date on which all necessary excavation permits for the project have been obtained.

11. According to Section 131.N.42.k, operation hours for excavation processing and

filling operations shall be restricted to between 7:00 a.m. and 6:00 p.m. No blasting shall be permitted between the hours of 6:00 p.m. and 7:30 a.m. No operation shall be permitted on Sundays except for repairs to equipment. Only sales and deliveries may be permitted on Saturdays.

The proposed total hours of operation each day for the quarry would not exceed 11 hours and would be conducted within the limits of from 6:00 a.m. to 6:00 p.m., Monday through Sunday. The only quarry activities on Saturdays would be limited to sales, deliveries, and repairs to equipment. The only activity on Sunday would be limited to equipment repairs. The rest of the week, these and other activities including the excavation work, the processing of stone, and the stockpiling of products, would take place between 7:00 a.m. to 6:00 p.m. No excavation or moving of dirt would occur before 7:00 a.m. Provided that no blasting will occur between the hours of 6:00 p.m. and 7:30 a.m. on any day, the petition complies with Section 131.N.42.k.

12. As proposed, access into the site will be gained from a single point at the southeast portion of the property on U.S. Route 1. No access will be permitted from Mission Road. The Petitioner proposes to permit vehicles to enter the access point from either the southbound or northbound lanes of U.S. Route 1, although the Petitioner opined that it is likely that 80% of the trucks entering the site will do so from the southbound lane. The paved access drive would loop from the southeast entrance to a single exit at the southwest corner of the site opposite Patuxent Range Drive, a signalized intersection. Vehicles exiting the site would be permitted to turn either right or left onto U.S. Route 1, although in the Petitioner's opinion 80% of the truck traffic will likely head southbound.

Because of the unique conditions for public road access peculiar to the site, including the high traffic volume on U.S. Route 1 in the vicinity of the site, including a high proportion of truck traffic; the high number of access points and intersections along Route 1; the relatively steep grade of the Route 1 roadway in front of the site; and the relatively high speed limit on Route 1 in the vicinity of the site, the Board finds that safe public road access is not available as proposed by the Petitioner. If, however, the northern entrance to the site is restricted to right-turns only from southbound Route 1, and a deceleration lane installed; ingress is permitted at the signalized southern intersection at Patuxent Range Drive; an acceleration lane is installed for southbound traffic exiting the southern entrance; and the posted speed limit on U.S. Route 1 between Route 175 and Route 32 is reduced to no more than 40 miles per hour, then the Board finds that safe public access shall be available, in accordance with section 131.N.42.1.

13. In accordance with Section 131.N.42.m, the petition submitted, as amended by the Petitioner's testimony, shows the following:

- (a) Setback area, including screening and fencing;
- (b) Portion of tract, if any, actually being excavated, and proposed excavation areas;
- (c) Existing and proposed structures and major mechanical equipment;
- (d) Existing and proposed access roads;
- (e) Water supply and sewage disposal;
- (f) All necessary pollution control measures;
- (g) Stockpile area;

(h) Points of access to the site and provisions to control unauthorized entry to the site along the entire perimeter;

(i) Survey boundaries of the subject property and proposed operation based on the Maryland State Plane Coordinate System;

(j) A road condition study to determine the adequacy of the structural elements serving the site for truck traffic to be generated by the quarry (the road condition study is satisfied by the submission of a letter from the State Highway Administration indicating the structural adequacy of U.S. Route 1 to support the estimated truck traffic).

14. In accordance with Section 131.N.42.n, the Petitioner has submitted a reclamation plan at a scale of 1"=200' setting forth a plan for reclamation of the permit area, including a reclamation contour plan showing contour intervals of 2', indicating the general grades and slopes to which excavated or filled areas are to be graded. A description of the methods and materials proposed for rehabilitation of top soil has been provided. The reclamation schedule includes specific information relating to regrading, drainage, landscaping, erosion backfilling, removal of machinery and structures, and closing of access roads.

15. Pursuant to Section 131.N.42.n(1), the Petitioner agrees that all disturbed land shall be regraded as required by the Maryland Department of Natural Resources. The quarry will be fenced with a durable galvanized fence 6' high, located not less than 20 feet from the edge of excavation. The County shall have the right to enter and repair or maintain such fence whenever the property owner shall fail to do so. The property owner shall be liable to the County for the cost of the repairs or maintenance.

16. As required by Section 131.N.42.n(2), the Petitioner's plan provides that all piles of

disturbed earth or material resulting from the excavating or filling operation shall be graded to a smooth contour to control erosion and to prevent ponding and undrained water pockets. As a condition of the special exception, the graded area shall be covered with suitable soil to sustain growth, then vegetatively stabilized using a perennial cover species as recommended by the County Soil Conservation District.

17. The Petitioner proposes to remove the structures for the crushing and screening operations, the concrete plant, the asphalt plant, the product stacking and loading facilities, and all product stockpiles at the end of operations. The equipment maintenance building and the operations center office building, permitted uses on the site, will remain. Accordingly, all machinery and structures shall be completely removed and underlying excavations filled to grade, except structures or machinery that are to be continued in operation for a use permitted under the zoning classification, as required by Section 131.N.42.n.(3).

18. The Petitioner proposes that the access road constructed in the southern portion of the site would remain following the completion of the quarry operations. The Petitioner states that this road is intended to be used as part of a future development of the property. Such access will also be necessary to serve the office building and maintenance building which will remain on the site. No other access will be permitted onto the site. Provided that access to the abandoned excavation area is suitably barricaded to prevent the passage of vehicles either into or out of the abandoned area, then, upon the abandonment of excavation operations, all access roads shall be suitably barricaded to prevent the passage of vehicles either into or out of the abandoned area, except such access as needed for vehicles engaged in rehabilitation work, until the plan for rehabilitation has been completed and other use necessitating access has been commenced on the

property, in accordance with Section 131.N.42.n.(4):

19. At the hearing the Petitioner submitted detailed engineering studies setting forth the estimated cost of the for rehabilitation, and a bond to cover the estimated cost of the rehabilitation plan. As a condition of approval, and in accordance with Section 131.N.42.n.(5), the Petitioner shall be required to submit detailed engineering studies setting forth the estimated cost of the accepted plan for rehabilitation for the approval of the Board of Appeals prior to the final approval of the site development plan for the use. These studies shall be subject to periodic review by the Board of Appeals every five years beginning with final approval of the site development plan. A bond shall be provided, or adequate collateral shall be kept in escrow, drawing interest to the benefit of the Petitioner, to cover the approved estimated cost of the accepted plan for rehabilitation. Said bond or escrow shall be established in a manner acceptable to the Board and the County prior to the approval of the site development plan for the use and reviewed every five years thereafter. Said bond or escrow shall not be released unless it is determined that the Petitioner has achieved successful completion of the rehabilitation program.

20. As a condition of the special exception, and in compliance with Section 131.N.42.o, prior to the approval of the site development plan for the use, the Petitioner shall be required to warrant and provide documentation that all persons having an interest of record in said land shall cause to be recorded among the land records of the County:

- (a) A description of the area included within the special exception area,
- (b) The application number (BOA Case No. 95-58E) and the date of this Decision and Order,
- (c) A statement indicating that use of the land will be in accordance with the

site development plan submitted for approval and the Special Exception Plan, including the Reclamation Plan as approved herein, and

- (d) A declaration binding their heirs and assigns to utilize the land in accordance with said site development plan and the Special Exception Plan, including the Reclamation Plan until excavation processing or filling operations cease and rehabilitation of the land is completed.

21. As a condition of the special exception, and in compliance with Section 131.N.42.p, prior to the approval of the site development plan for the use, the Petitioner shall enter into an agreement with the County which provides that, if the quarry is cited as operating in violation of any of the provisions or conditions of the special exception including failure to comply with the approved Reclamation Plan, in such a way as to require corrective action, the Petitioner shall cause the corrective action to be taken. The agreement shall also stipulate that if the Petitioner fails to take the necessary corrective action within 30 days or written notice from the County to do so, the required bonds or collateral noted above will be forfeited and the County may cause corrective actions to be commenced. The agreement shall also provide that the Petitioner shall agree to pay any costs for corrective action which exceed the bond or collateral amount.

ORDER

Based upon the foregoing, it is this 24th day of April, 1997, by the Howard County Board of Appeals, **ORDERED**:

That the Petition of Chase Limited Partnership, Petitioner, for a special exception for a quarry in an M-1 (Manufacturing:Light) Zoning District, filed pursuant to Section 131.N.42 of the Howard County Zoning Regulations be, and the same hereby is, **GRANTED**, subject to the following conditions:

1. The special exception shall apply only to the proposed stone, sand, gravel, clay and fill-dirt quarry and accessory asphalt and concrete plant uses as described in the petition, and as depicted on the special exception plan for Chase Limited Partnership submitted on September 22, 1995, consisting of an Existing Zoning and Utilities Plan, Land Use Plan, Operations Plan, Reclamation Plan, and Reclamation Cross Sections ("Special Exception Plan") as amended by this Decision and Order, and not to any other activities, uses, or structures on the subject property.
2. Areas on the site which are regraded during the Reclamation Plan phase shall be covered with suitable soil to sustain growth, then vegetatively stabilized using a perennial cover species as recommended by the County Soil Conservation District.
3. Upon the abandonment of excavation operations on the site or on any portion of the site, all access roads shall be suitably barricaded to prevent the passage of vehicles either into or out of the abandoned area, except such access as needed for vehicles engaged in rehabilitation work, until the plan for rehabilitation has been completed and other uses necessitating access have commenced on the property.
4. The Petitioner shall submit detailed engineering studies setting forth the estimated cost of the accepted plan for rehabilitation for the approval of the Board of Appeals prior to the final approval of the site development plan for the use. These studies shall be subject to periodic review by the Board of Appeals every five years beginning with final approval of the site development plan. A bond shall be provided, or adequate collateral shall be kept in escrow, drawing interest to the benefit of the Petitioner, to cover the approved estimated cost of the accepted plan for rehabilitation. Said bond or escrow shall be established in a manner acceptable to the Board and the County prior to the approval of the site

development plan for the use and reviewed every five years thereafter. Said bond or escrow shall not be released unless it is determined that the Petitioner has achieved successful completion of the rehabilitation program.

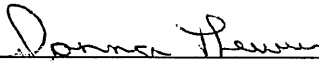
5. Prior to the approval of the site development plan for the use, the Petitioner shall warrant and shall provide documentation that all persons having an interest of record in said land shall cause to be recorded among the land records of the County:
 - (a) A description of the area included within the special exception area,
 - (b) The application number (BOA Case No. 95-58E) and the date of this Decision and Order,
 - (c) A statement indicating that use of the land will be in accordance with the site development plan submitted for approval and the Special Exception Plan, including the Reclamation Plan as approved herein, and
 - (d) A declaration binding their heirs and assigns to utilize the land in accordance with said site development plan and the Special Exception Plan, including the Reclamation Plan until excavation processing or filling operations cease and rehabilitation of the land is completed.
6. Prior to the approval of the site development plan for the use, the Petitioner shall enter into an agreement with the County which provides that, if the quarry is cited as operating in violation of any of the provisions or conditions of the special exception including failure to comply with the approved Reclamation Plan, in such a way as to require corrective action, the Petitioner shall cause the corrective action to be taken. The agreement shall also stipulate that if the Petitioner fails to take the necessary corrective action within 30 days or written notice from the County to do so, the required bonds or collateral noted above will be forfeited and the County may cause corrective actions to be commenced. The agreement shall also provide that the Petitioner shall agree to pay any costs for corrective action which exceed the bond or collateral amount.
7. Any exterior lighting shall be shielded and directed so that it does not illuminate residential properties, does not shine directly onto any adjacent properties, and does not produce glare which would cause a hazard for motor vehicle operators in the vicinity of the site.
8. Public water will be provided on site as required by the Department of Fire and Rescue Services.

9. The Petitioner shall make a good faith effort working with the community and CSX Railroad to construct a security fence along the western boundary to prevent access to the stockpile area.
10. Prior to the commencement of quarry operations, the Petitioner shall donate approximately 7 acres of land on Mission Road, as shown on the Land Use Plan, to the Ridgely's Run Community Association for use as a community center. The Petitioner will construct on the 7 acres, at its own expense, (i) a community center building of approximately 5,000 square feet with parking, (ii) an exterior all-purpose basketball court, (iii) two tennis courts with nets and fencing, and (iv) grading for a little league baseball diamond and provide a little league baseball backstop. Construction will begin prior to commencement of quarry operations, and the Petitioner will diligently pursue completion of construction.
11. During each year of quarry operation, the Petitioner shall donate to the Ridgely's Run Community Association five cents (5¢) per ton of marketable stone product shipped from the project operations, with a minimum donation of \$50,000.00 per year to be used for the programs of the community center for the betterment and welfare of the community.
12. The Petitioner will warrant that existing wells will not be affected by quarry operations. Tests will be done prior to development and subsequent well monitoring will occur with a sampling program by an independent environmental consultant.
13. The Petitioner shall establish and implement procedures for the investigation and reporting of vibration and damages attributable to the quarry operations on all homes within 1,000 feet of the quarry excavation area and the 12 Heritage Woods homes identified in the Petitioner's testimony.
14. The Petitioner will fill the existing quarry at the back of Pine Road using overburden from the new quarry and other material.
15. Structures shall not exceed a height of 65 feet; stockpiles shall not exceed a height of 60 feet; and berms shall not exceed a height of 40 feet.
16. Trees removed for construction of berms shall be replaced by adequate landscaping, reforestation, and seeding or sodding of the berms.
17. Dust emissions will be controlled and maintained within the confines of the site in accordance with applicable State regulations.
18. Blasting will occur no more than 10 seconds per month. No blasting will occur between the hours of 6:00 p.m. and 7:30 a.m. on any day.

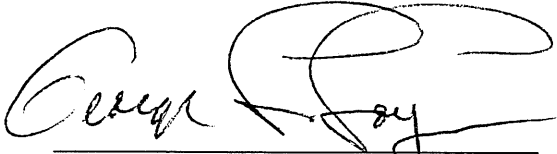
19. The Petitioner shall provide adequate security to control unauthorized entry to the site along the entire perimeter, including security personnel on duty on the site 24 hours each day. The quarry will be fenced with a durable galvanized fence 6' high, located not less than 20 feet from the edge of excavation. The County shall have the right to enter and repair or maintain such fence whenever the property owner shall fail to do so. The property owner shall be liable to the County for the cost of the repairs or maintenance.
20. The Petitioner shall prohibit trucks from using Mission Road to enter or leave the quarry operation.
21. The northern entrance to the site shall be restricted to right-turns only from southbound Route 1, and a deceleration lane shall be installed. An acceleration lane shall be installed for southbound traffic exiting the southern entrance at Patuxent Range Drive.
22. The posted speed limit on U.S. Route 1 between Route 175 and Route 32 shall be reduced to no more than 40 miles per hour.
23. The special exception granted herein shall be subject to renewal five years from the date of approval of the final site development plan for the project, and every five years thereafter, in accordance with Section 131.H.2 of the Zoning Regulations; except that the special exception shall terminate without right of renewal 25 years from the date on which all necessary excavation permits for the project have been obtained.
24. The Petitioner shall comply with all applicable federal, State, and County laws and regulations.

ATTEST:

HOWARD COUNTY BOARD OF
APPEALS

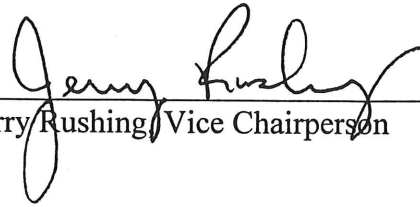



Donna Thewes, Secretary

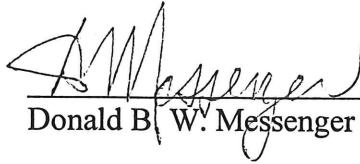


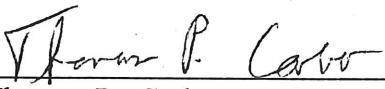
George L. Layman, Chairperson

PREPARED BY:
HOWARD COUNTY OFFICE OF LAW
BARBARA M. COOK
COUNTY SOLICITOR


Jerry Rushing Vice Chairperson



Evelyn Tanner

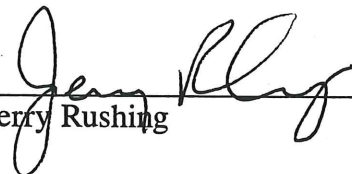

Donald B. W. Messenger



Thomas P. Carbo
Senior Assistant County Solicitor

DID NOT PARTICIPATE
James W. Pfefferkorn

I HEREBY CERTIFY that I have listened to the tapes and reviewed the record for those meetings for which I was absent.


George L. Layman


Jerry Rushing


Evelyn Tanner


Donald B. W. Messenger