

February 25, 2000

**TECHNICAL STAFF REPORT:**

TO: The Prince George's County Planning Board  
The Prince George's County District Council

VIA: Arie Stouten, Zoning Supervisor

FROM: Tom Lockard, Senior Planner

SUBJECT: **Special Exception Application No. 4355**

REQUEST: **Rubble Fill in the O-S Zone**

RECOMMENDATION: **Approval, subject to conditions**

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NOTE:

This application is on the agenda for the Planning Board to decide whether or not to schedule a public hearing. If the Planning Board decides to hear the application, it will be placed on a future agenda.

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

You are encouraged to become a person of record in this application. The request must be made in writing and sent to the Office of the Zoning Hearing Examiner at the address indicated above. Questions about becoming a person of record should be directed to the Hearing Examiner at 301-952-3644. All other questions should be directed to the Development Review Division at 301-952-3280.

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## FINDINGS:

- A. Location and Field Inspection: The subject property consists of 167 $\frac{1}{2}$  acres located on the east side of MD 381, 2,200 $\frac{1}{2}$  feet north of its intersection with MD 382. It is the site of a former sand and gravel operation known as the Lapin Pit (SE-3636) which operated in the 1980s, and has since been reclaimed. The site is largely cleared as a result of the mining activity, although there are wide forested buffers (100-700+ feet) around most of the periphery and along two streams that traverse the property.
- B. History: Special Exception Application No. 3636 was approved on April 24, 1986, for surface mining on the subject property. Prior to that, mining was permitted under SE-3433. Mining continued until the early 1990s, when the site was reclaimed. In 1993, the Sectional Map Amendment (SMA) for Subregion VI retained the site in the O-S (Open Space) Zone.
- C. Master Plan Recommendation: The 1993 Master Plan for Subregion VI recommends the site for Low Rural residential use (0.2 dwellings/acre). The subsequent SMA retained the site in the O-S Zone.
- D. Request: The applicant requests permission to operate a rubble fill for a period of 17 years. Three mounds are proposed, ranging from 36 to 107 feet above grade. Part of the site will also be used for borrow to cover and cap the fill. The footprint of the fill and borrow areas are approximately 75 acres, leaving over 90 acres generally undisturbed. The site is accessed by an existing haul road directly from MD 381. The applicant proposes hours of operations from 7:00 AM to 5:00 PM, Monday through Friday. They propose an average of 50 loads per day, not to exceed 100 loads. The applicant contends that the site will be for their sole use. They also claim the rubble fill will be fully lined and covered every three days in accordance with State law.
- E. Neighborhood and Surrounding Uses: The site is located within a neighborhood with the following boundaries:

<u>North:</u>	Baden-Westwood Road
<u>East:</u>	PEPCO right-of-way
<u>South:</u>	Croom Road (MD 382)
<u>West:</u>	Aquasco Road (MD 381)

This is the same neighborhood as was accepted in SE-3636. It is rural in character, consisting of scattered residences on large parcels. Although large sections have been cleared for agricultural and mining activities, much of the land remains forested.

- F. Specific Special Exception Requirements (Sec. 27-406. Sanitary Landfill; Rubble Fill):
- (1) A sanitary landfill or rubble fill may be permitted as a temporary Special Exception.
  - (2) The District Council shall determine the period of time for which the Special Exception is valid.

Finding: The applicant estimates that it will take 17 years to fill the site and asks that the special exception be approved for that period of time.

- (3) In the R-E Zone, the landfill is only allowed if the neighborhood is substantially undeveloped and the landfill is an extension of an existing sanitary landfill on abutting land for which the approved Special Exception has not expired. This is not an amendment to an approved Special Exception under Subdivision 10 of Division 1, above.

Finding: The site is in the O-S Zone, not the R-E Zone.

- (4) An application for a sanitary landfill or rubble fill that includes a "rock crusher" on the site must show the location of the proposed "rock crusher" on the site plan.

Finding: The applicant does not propose a rock crusher at this site.

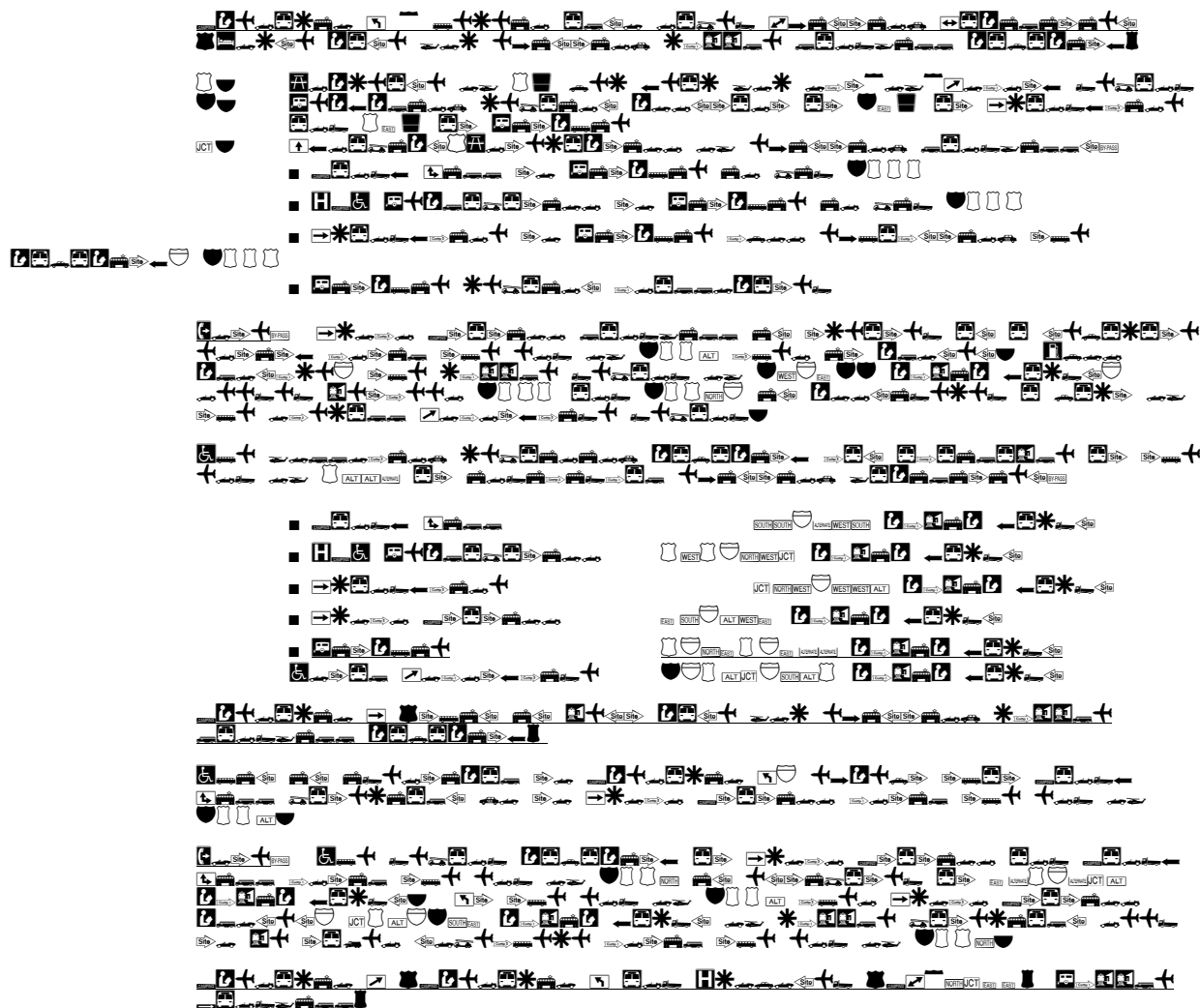
- (5) The Technical Staff Report prepared in response to the application shall include a current, Countywide inventory of the locations, dates of approval, and conditions of approval concerning haul routes and estimated loads per day for all approved and pending Special Exceptions for sand and gravel wet-processing, sanitary landfills and rubble fills, and surface mining, as indicated by the record in the case. The inventory shall also include the locations of all nonconforming sand and gravel wet-processing, sanitary landfills and rubble fills, and surface mining operations throughout the County that were certified after September 6, 1974.
- (6) In reviewing the application for compliance with the required findings set forth in Sections 27-317(a)(4) and 27-317(a)(5), the District Council shall consider the inventory required in Section 27-406(e).

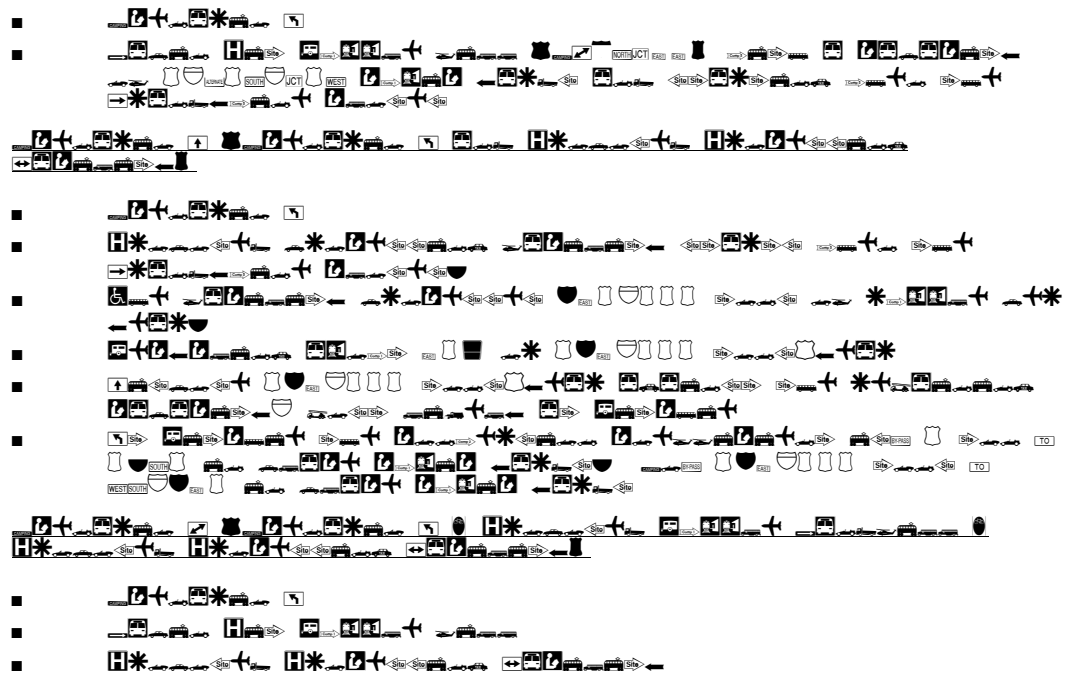
Finding: The Environmental Planning Section (M-NCPPC) prepared the required inventory, identified as Appendix 8 in the report entitled *Analysis of Rubble Landfills Capacity in Prince George's County, MD. (1999-2014)* for SE-4355. The Landfills Capacity Report is currently in draft form and will be incorporated in the record of this case by the time of the Planning Board's review. A copy of the inventory is attached to this staff report. The inventory lists 57 sites comprised of 47 sand and gravel mines, 5 wash plants, 3 rubble fills and 2 sanitary landfills.

- (7) The Technical Staff Report prepared in response to an application for a rubble fill shall include an analysis of need based on the most current available projections of residential and employment growth in Prince George's County over a fifteen-year period. The District Council shall consider this analysis when determining compliance with the finding required in Subsection (h), below, and when determining the period of time for which the Special Exception is valid.

- Finding:** The Landfills Capacity Report addresses the need for another rubble fill in the County. It indicates that there are currently five active landfill operations which are accepting rubble materials. Four of them are located in Prince George's County and the fifth, known as PST is located in Anne Arundel County. By January 1, 2002 three of the existing operations, PST, Sandy Hill Landfill and Brandywine will cease operations leaving only Brown Station Landfill and Ritchie Rubble Fill.

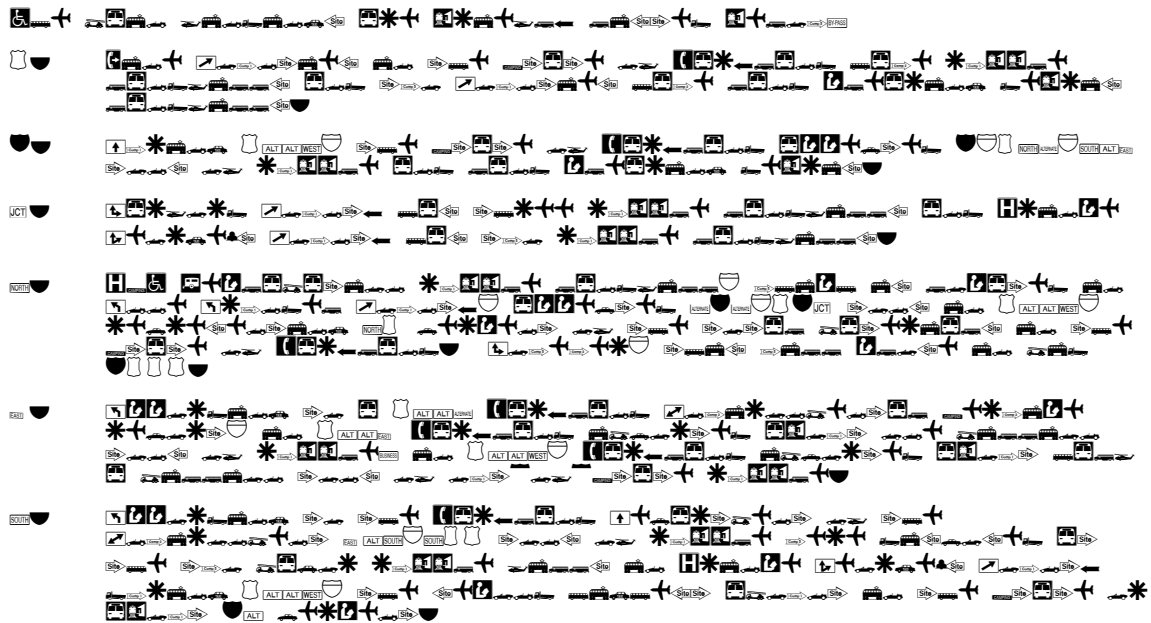
The Landfills Capacity Report evaluates several scenarios with respect to allocation of materials between various sites, growth in demand and the amount of recycling. The report also takes into account the new recycling facility located on Dowerhouse Road. The scenarios make it possible to evaluate the expected remaining life of the existing and proposed facilities:





Scenario F (Limitation of 50 truck loads per day)

- Scenario A
- Lapin Pit Rubble fill with maximum annual volume at 106,000 cubic yards disposed
- Proposed Processing Facility





A. No Trip Limitation for SE-4355

1. Countywide capacity at the existing solid waste facilities (Scenarios A and B) will not be sufficient to meet the in-County demand as well as the total (in- and out-of-County) demand. The in-County demand will be sufficient until 2010-2011, while the total demand will be sufficient to 2005-2006.
2. The in-County demand can be satisfied by the Countywide rubble fill capacities under Scenario C (Existing plus Lapin Pit landfill) and Scenario E (Existing plus Lapin Pit and Processing Facility).
3. Even under the best Scenario (E), the total demand (in- and out-of-County) for Countywide rubble fill capacity is going to be satisfied only until 2012, that is, a few years short of the 15-year planning period (1999-2014).
4. There are two main options that can be used to address the rubble fill capacity in Prince George's County by 2012 for total demand:
  - a. Allow the industry to export the excess rubble that can not be disposed at Brandywine Lapin Pit to other out-of-County rubble landfills; and
  - b. Approve another rubble fill in the County which should be operational on or near 2012 to accommodate total rubble demand.

B. Trip Limitation for SE-4355 (50 trucks per day)

1. The rubble fill capacity for in-County rubble will be sufficient beyond 2014.
2. The overall available Countywide rubble fill capacity for the total demand will be sufficient until 2012.
3. However, in the year 2009, the total demand for Countywide rubble fill capacity will not be sufficient because of the 50 truck loads restriction at Brandywine Lapin Pit.
4. There are three main options that can be used to address the rubble fill capacity in Prince George's County by 2009 for total demand. They are:
  - a. Lift the restrictions at Brandywine Lapin Pit and allow the Ritchie rubble to be disposed there.
  - b. Allow the industry to export the excess rubble that cannot be disposed in the County.
  - c. Approve another rubble fill in the County, which should be operational on or near 2009 to accommodate the total rubble demand.

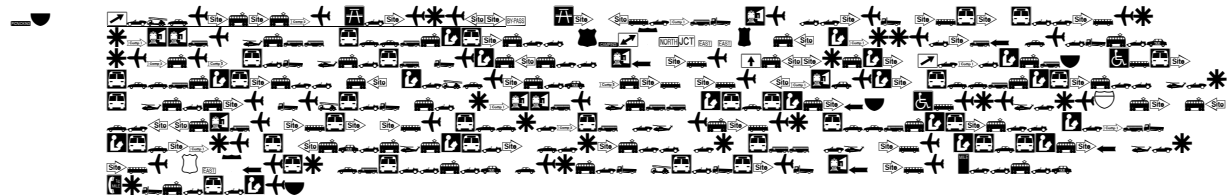
G. Parking Regulations: The applicant is required to provide three parking spaces for the 630 square foot scale house, which is the only building proposed for the site. These spaces are shown on the site plan, including one space for the handicapped.

H. Landscape Manual Requirements: The *Landscape Manual* classifies a rubble fill as a low-intensity use. The proposal must comply with the requirements of Sections 4.2 (Commercial and Industrial Landscape Strip Requirements) and 4.7 (Buffering Incompatible Uses) of the *Landscape Manual*. According to a memo from the Urban Design Planning staff (M-NCPPC) dated August 17, 1999, the following is required to bring the Landscape Plan into compliance:

1. 3 shade trees and 25 shrubs along MD 381.
2. A 30-foot-wide landscape strip with 1,125 planting units along the property line abutting the Forestville Asphalt Company property.
3. In accordance with pages 57-61 of the Landscape Manual, a 40-foot-wide strip of trees along the property line abutting the St. Thomas Methodist Church (an historic site, see next section of this report).
4. A 20-foot-wide landscape strip with 88 planting units along the property line abutting the Saunder property.
5. A 20-foot-wide landscape strip with 656 planting units along the property line abutting the Gray, Duckett and Johnson properties.
6. A 20-foot-wide landscape strip with 248 planting units along the property line abutting the Dent property.
7. Existing woodland along the above property lines may be counted towards fulfilling the required planting unit requirements. If existing woodland is substituted for the required planting units, a note must be added to the drawings clearly stating the width of the landscape buffer.

I. Zone Standards: The proposal conforms to the requirements and standards for the O-S Zone.

J. Sign Regulations: No signs are shown along MD 381. If one is proposed, it should be added to the site plan.



L. Other Issues:



Environmental Impacts: The Environmental Planning Section (M-NCPPC), in their referral dated January 21, 2000, evaluated this request and made the following findings:

■ This property was previously exempted from the requirements of the Woodland Conservation Ordinance since there was an active mining permit (#80-SP-00926-1) and a Special Exception (SE-3433) for surface mining. As of this date, the mining operation and the site reclamation have been completed. The proposed rubble fill as submitted will be subject to the requirements of the Prince George's County Woodland Conservation Ordinance. The applicant has submitted a Detailed Forest Stand Delineation (FSD) for the 95.3 acres of woodland on this property. The FSD has been reviewed and found to be acceptable. A Type I Tree Conservation Plan (TCPI/29/99) has been reviewed and found to satisfy the requirements of the Prince George's County Woodland Conservation Ordinance. This 166.2 acre property is located on the east side of Maryland Route 381 approximately 1.03 miles north of the intersection with Maryland Route 382. The property which is located in the O-S zone has a net tract area of 163.7 acres and a Woodland Conservation Threshold of 50% or 81.85 acres. The proposed rubble fill and borrow pit will clear 24.01 acres of woodland which is subject to the 1:1 replacement requirement and the 2:1 replacement requirements of the Woodland Conservation Ordinance. The total requirement for this property is 95.77 acres or 58.5% of the net tract. There will be a overall net gain of 0.47 acres of woodland following completion of this project. TCPI/29/99 is recommended for approval subject to the following condition:

Prior to the issuance of any grading permits for this property the applicant shall obtain approval of a Type II Tree Conservation Plan and include copies of the approved plan with the grading permit application. In addition, the applicant shall post all required reforestation bonds.

■ Streams, wetlands and floodplain areas have been found to occur on this property. These features should be protected in accordance with requirements of the Prince George's County Subdivision Ordinance Section 24-130 and in accordance with the Woodland Conservation and Tree Preservation Policy Document. The plans reflect a 50 foot nondisturbance buffer for all streams other than at existing road crossing. That buffer has been extended to include adjacent floodplain areas, nontidal wetlands, 25 foot wetland buffers and adjacent slopes of 25% or greater and adjacent slopes of 15-25% with soils having a K-factor of 0.37 or greater. This application does not propose any disturbances to the streams, stream buffers, wetlands or wetland buffers. Should the plan be revised in such a manner as to impact these features the applicant will be required to obtain the appropriate Federal and/or State permits for the proposed disturbances.

■ Operations of this type often generate noise levels that adversely impact adjacent residential areas. In order to fully evaluate any potential noise impacts associated with this application, the applicant provided the M-NCPPC Environmental Planning Section with a list of the equipment that will be used on this site along with

documentation of noise ratings for that equipment, the hours of operation and the time frame for the hours of the most intense operations. Polysonics Corporation prepared a Noise analysis, dated November 11, 1999 which has been reviewed by this office and found to adequately address the concerns of this office with respect to noise impacts on the adjacent properties. It was found that the rubble fill and borrow pit activities will not generate sufficient noise to adversely impact the adjacent residential areas. However, the truck traffic on the entrance/haul road may generate noise levels as high as 75 dBA at the adjacent property lines.

■The Noise Study states ■Sound mitigation will be provided by appropriate noise barriers as necessary along the entrance/haul road to achieve 65 dBA at adjacent property lines. • The plans as submitted do not reflect noise attenuation measures. Prior to Decision of Finality for this plan, the applicant shall submit to the Environmental Planning Section (EPS) a revised plan which addresses the necessary noise mitigation measures along with certification from Polysonics Corp. indicating that the proposed barriers will adequately attenuate the noise impacts to the properties adjacent to the entrance/haul roads. The EPS shall review the revised plans and make the appropriate findings with respect to the noise mitigation measures and then notify the Zoning Hearing Examiners office by memorandum and a copy of the plans.

■No Marlboro clays have been identified on this site. No Scenic or Historic Roads have been identified on or adjacent to this site. The property is located in Sewer and Water Service categories 6 and 6 respectively.

■The applicant has provided data from Hydro-Terra, Inc. With respect to the monitoring the ground water levels on this property since August 8, 1990. According to the data received, the rubble fill should not intercept the ground water on this site. If at any time during the initial grading of this site the applicant should intercept the ground water table, all activities should immediately be halted until such time as the Environmental Planning Section has been notified and inspectors from the MD Department of the Environment and/or DER can be consulted.

■An issue that has been increasingly evident in the last several years is the impact a project may have on the viewshed of the surrounding neighborhood and how the proposal will affect the existing and proposed uses. This has been an issue for monopoles, commercial sites, industrial sites and a proposed rubble fill in the southern part of the County. In order to evaluate the potential impacts of this application on the viewshed of the surrounding neighborhood, the applicant has provided the Environmental Planning Section with a viewshed analysis. The analysis was conducted for two properties, the Carine Gray property and the St. Thomas Methodist Church property. A visual assessment using a line of sight methodology was preformed for each of these properties. Past experience in this office indicates that a deciduous forest buffer of 150 feet or more would generally be adequate to mitigate the visual impacts associated with this operation. In each of these situations there was buffering but it did not exceed the 150 feet necessary to

adequately buffer the view of this rubble fill once completed. The EPS evaluated several other viewing locations and found that most of the road intersections and residences within one (1) mile would not have a direct line of sight to this rubble fill.

However, there were two locations that will have a nearly unobstructed view of the rubble fill upon completion, the Schmidt Outdoor Education facility and the residence of Mark Whitfield. Both of these locations are at least 1000 feet from the ultimate high point of the rubble fill and no amount of screening placed on the Brandywine/Lapin site will change the view of the rubble fill upon completion. The only alternative would be the placement of screening in closer proximity to the viewing locations.

Traffic Considerations: The applicant is proposing to add an average of 50 truck loads (not to exceed 100 loads) on MD 381. This equates to twice as many truck trips, since a load involves both a trip in and a trip out. The nearest impacted intersection, MD 381 and US 301, currently operates at a levels-of-service (LOS) B/A in the AM and PM peak hours, respectively. However, when background conditions are considered (existing conditions plus approved but not yet built industrial development), the LOS drops to E/D. The proposed use would add an additional 20 trips in each of the peak hours. In order to ameliorate the impact on the intersection, the Transportation Planning Section staff (M-NCPPC), in conjunction with the State Highway Administration (SHA) recommend the following improvements and conditions:

1. The applicant, his heirs, successors or assigns, shall limit the hauling of materials to an average of 50 loads per day, not to exceed 100 loads, entering the subject property.
2. Trucks shall access the subject property using MD 381, and shall not utilize MD 382 or other rural roadways in the area.
3. Prior to the issuance of any permits within the subject property, the following roadway modifications shall (a) have full financial assurances, (b) have been permitted for construction through the SHA access permit process, and (c) have an agreed-upon timetable for construction and/or implementation with the SHA:
  1. Extend the existing acceleration lane along northbound US 301 from the westbound MD 381 right-turn lane for a distance of 700 feet, or such distance that is deemed to be reasonable by the SHA.
  2. In accordance with SHA recommendations and procedures, examine the traffic queues using the southbound US 301 left-turn lane at MD 381, and lengthen the left-turn lane if the stacking area is deemed to be inadequate by the SHA.

Historic Site Considerations: The subject property adjoins Historic Site #87A-10, the St. Thomas Methodist Episcopal Church and cemetery. It was built in 1911 to replace a

building that had stood at that location since 1868. It was designated as an historic site in 1989. The church building is little used and has deteriorated. However, it remains an important element in the black Methodist community of southeast Prince George's County. It should be properly buffered (see Section 11.1, above) and the status of the church as an historic site should be indicated on the site plan.

Site Plan Deficiencies: The site plan must be amended to show the following information:

1. The surface of the parking lot must be labeled on the site plan.
2. Lot coverage calculations must be added to the site plan.
3. All drive aisles must be dimensioned on the site plan. A 22-foot drive aisle is required for one-way traffic adjacent to the 90 degree parking spaces. This must be dimensioned on the site plan.
4. A ramp or other means of accessible entrance to the scale house (trailer) must be indicated on the site plan.
5. The centerline and proposed right-of-way of Brandywine Road must be indicated on the site plan.

M. Required Findings:

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

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

Finding: The purposes of the Zoning Ordinance are contained in Section 27-102. They are many and varied, but all are predicated on protecting and promoting the health, safety, morals, comfort, convenience and welfare of the present and future inhabitants of the county. The applicant's proposal can be found to generally be in harmony with these purposes, and in particular, the request furthers:

- (1) To implement the General Plans, Area Master Plans and Functional Master Plans.

Finding: The 1993 *Master Plan for Subregion VI* is silent on the issue of rubble fills, but does contain considerable discussion and guidelines for associated uses (particularly sand and gravel mines, which this property was used as for many years). By virtue of the fact that a rubble fill is permitted in the O-S Zone, it is presumed compatible with the zone in which this property was placed by the 1993 SMA.

- (4) To guide the orderly growth and development of the county, while recognizing the needs of agriculture, housing, industry and business.

Finding: Growth and development in Prince George's County bring with it a need for construction activities, which in turn generate demolition and other construction-related material. The County has determined that this type of material should be placed in rubble fills such as the applicant is proposing. There will be a need for additional rubble fills in the future as existing fills close, many of which do not have the liner, leachate recovery, cover and cap requirements that this fill will be subject to.

- (9) To encourage economic development activities that provide desirable employment in a broad, protected tax base.

Finding: The construction industry is a leading employer in Prince George's County. As discussed above, development drives the need for these types of fills. They must be provided in order for development of the County.

- (10) To prevent the overcrowding of land.

Finding: After its completion, the subject property will remain in permanent open space.

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

Finding: With the proposed conditions of approval in place, the proposed use meets the specific requirements and regulations for this type of use, as well as those pertaining to the O-S Zone.

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

Finding: The temporary use of the subject property as a rubble fill will not impair the integrity of the *Subregion VI Master Plan*. To the contrary, it would be consistent with that documents goals and objectives regarding the retention of permanent open space, which is the use to which this site will revert upon completion of fill activities.

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

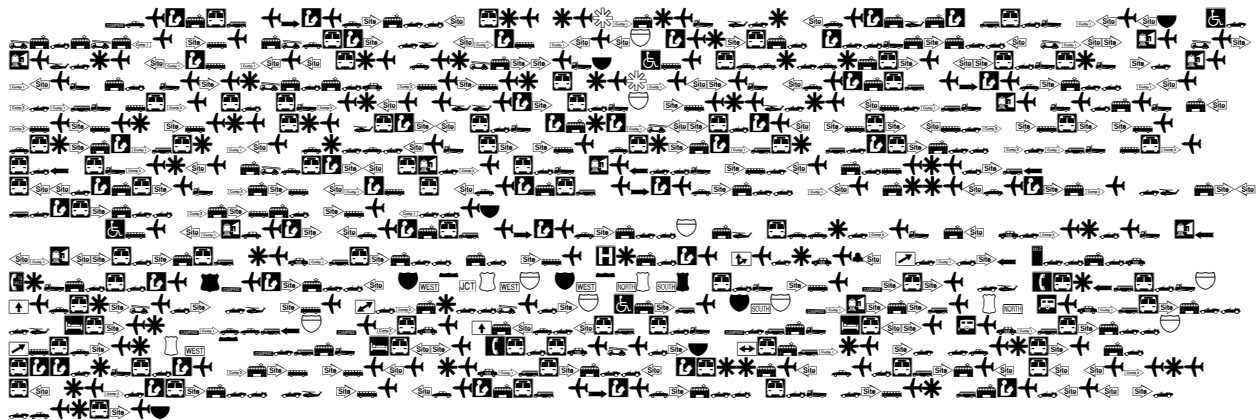
- (5) **The proposed use will not be detrimental to the use or development of adjacent properties or the general neighborhood.**

Finding: The State of Maryland's regulation of rubble fills has become much stricter through the years, due, in part, to the mistakes of the past. Today's fills are subject to State regulations including liners, leachate recovery systems, covering every three days and capping upon completion. These regulations, in concert with the conditions proposed in this report, will ensure that the proposed use will not adversely impact residents or workers in the surrounding neighborhood. Nor will it be detrimental to the development of adjacent properties. Upon completion, the site will revert to permanent open space.

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

Finding: The site has a Type I Tree Conservation Plan (TCPI/29/99) which is recommended for approval, subject to a condition which has been incorporated into the staff recommendation.

## CONCLUSION:



Therefore, staff recommends approval of Special Exception Application No. 4355, subject to the following conditions:

1. Trucks shall access the subject property using MD 381, and shall not utilize MD 382 or other rural roadways in the area.
2. Prior to the issuance of any permits within the subject property, the following roadway modifications shall (a) have full financial assurances, (b) have been permitted for construction through the SHA access permit process, and (c) have an agreed-upon timetable for construction and/or implementation with the SHA:

- a. Extend the existing acceleration lane along northbound US 301 from the westbound MD 381 right-turn lane for a distance of 700 feet, or such distance that is deemed to be reasonable by the SHA.
  - b. In accordance with SHA recommendations and procedures, examine the traffic queues using the southbound US 301 left-turn lane at MD 381, and lengthen the left-turn lane if the stacking area is deemed to be inadequate by the SHA.
3. The Landscape Plan shall be amended to show the following:
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  - e. A 20-foot-wide landscape strip with 656 planting units along the property line abutting the Gray, Duckett and Johnson properties.
  - f. A 20-foot-wide landscape strip with 248 planting units along the property line abutting the Dent property.
  - g. Existing woodland along the above property lines may be counted towards fulfilling the required planting unit requirements. If existing woodland is substituted for the required planting units, a note must be added to the drawings clearly stating the width of the landscape buffer.
4. The applicant, his heirs, successors or assigns, shall limit the hauling of materials to an average of 50 loads per day entering the subject property. In no event shall the site handle in excess of 100 loads per day entering the subject property.
5. Prior to the issuance of any grading permits for this property the applicant shall obtain approval of a Type II Tree Conservation Plan and include copies of the approved plan with the grading permit application. In addition, the applicant shall post all required reforestation bonds.
6. Prior to final disposition of the application, the applicant shall submit to the Environmental Planning Section (EPS) a revised plan which addresses the necessary noise mitigation measures along with certification from Polysonics Corp. indicating that the proposed

barriers will adequately attenuate the noise impacts to the properties adjacent to the entrance/haul roads.

7. If at any time during the initial grading of this site the applicant should intercept the ground water table, all activities should immediately be halted until such time as the Environmental Planning Section has been notified and inspectors from the MD Department of the Environment and/or DER can be consulted.
8. The site plan shall be amended to show the following:
  - a. The surface of the parking lot must be labeled on the site plan.
  - b. Lot coverage calculations must be added to the site plan.
  - c. All drive aisles must be dimensioned on the site plan. A 22-foot drive aisle is required for one-way traffic adjacent to the 90 degree parking spaces. This must be dimensioned on the site plan.
  - d. A ramp or other means of accessible entrance to the scale house (trailer) must be indicated on the site plan.
  - e. The centerline and proposed right-of-way of Brandywine Road must be indicated on the site plan.