



APPLICATION ACCEPTED: June 26, 2008
PLANNING COMMISSION: March 18, 2009
BOARD OF SUPERVISORS: not scheduled

County of Fairfax, Virginia

March 4, 2009

STAFF REPORT

WSPOD

APPLICATION SE 2008-SP-025

SPRINGFIELD DISTRICT

APPLICANT: Islamic Saudi Academy

ZONING: R-C, WS

PARCELS: 68-3 ((1)) 61-64

ACREAGE: 34.05 acres

FAR: 0.076

OPEN SPACE: 83%

UNDISTURBED OPEN SPACE: 50%

PLAN MAP: Residential use at 0.1-0.2 dwelling units per acre and Private Open Space

SE CATEGORY: Category 3; Private School of General Education

PROPOSAL: Approval of a special exception for a Private School of General Education with a maximum daily enrollment of 500 students (K through 12th grade)

The Fairfax County Report of March 4, 2009 was reviewed by the Residents of the neighborhoods affected by the Islamic Saudi Academy application SE-2008-SP-025.

It is the position of the participant reviewers that they are vehemently opposed to granting approval of this Special Exception in any form.

STAFF RECOMMENDATIONS:

Staff recommends approval of SE 2008-SP-025 subject to the proposed development conditions in Appendix 1.

Staff recommends approval of a modification of the transitional screening to allow the use of existing vegetation.

Tracy Strunk

Staff recommends approval of a waiver of the barrier requirement.

Staff recommends approval of a waiver of the Comprehensive Plan trail requirement, as conditioned.

Staff recommends approval of a waiver of interparcel access requirements.

It should be noted that it is not the intent of the staff to recommend that the Board, in adopting any conditions, relieve the applicant/owner from compliance with the provisions of any applicable ordinances, regulations, or adopted standards; and that, should this application be approved, such approval does not interfere with, abrogate or annul any easements, covenants, or other agreements between parties, as they may apply to the property subject to this application.

It should be further noted that the content of this report reflects the analysis and recommendation of staff; it does not reflect the position of the Board of Supervisors.

For information, contact the Zoning Evaluation Division, Department of Planning and Zoning, 12055 Government Center Parkway, Suite 801, Fairfax, Virginia 22035-5505, (703) 324-1290 TTY 711 (Virginia Relay Center).

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Specifically, this is a report that has been compiled by the Home Owner Associations of Beech Ridge, Ridges of Glendilough and the surrounding communities. It represents our issues, comments, observations and experiences regarding the Special Exception.

It is the consensus of the reviewer that overall, this Report provides no scientific or technical basis for an approval recommendation. It is superficial at best, almost remedial, and sorely lacking evidence to support the Planning Staff Recommendation.

We have not found any prior applications or permits from ISA in Fairfax County for any renovations on the property.

The 17 pages provided by Fairfax County that layout and describe the Special Exception is unreadable and should never have been included in the document that was distributed to the public. The ISA plats, provided at the meeting are inadequate. They are it is too small for the general public to read.



Americans with Disabilities Act (ADA): Reasonable accommodation is available upon 7 days advance notice. For additional information on ADA call (703) 324-1334 or TTY 711 (Virginia Relay Center).

Issue of the Special Exception

The health, safety and welfare of its citizens is guaranteed under the Commonwealth of Virginia's Constitution. It is also found throughout the Virginia Code.

The ISA is applying for a special exception. The Special Exception is not a right nor is it guaranteed; especially, since the property is owned by a foreign government, Saudi Arabia.

Every applicant for a Special Exception needs to be scrutinized and due diligence applied to their request. The County Planning Staff needs to follow through and provide a background review to assure the applicant has a valid request.

Questions still exist as to who is the applicant? Is the application filed under the proper name? We are lacking the history and the operational background information on the school.

On March 10, 2009, the citizens were precluded from addressing the issue related to the applicant's validity to have the Special Exception.

It is our understanding that the existing Special Permit goes with the land at the current site; hence, when the Saudi government bought the property they just moved in and started the ISA. There was no contact with the Fairfax County Government, no additional permitting required.

Notification of the surrounding neighborhood citizens (as required by VA code 15.2-2404B) about the ISA application was sporadic. The majority of the neighbors were not notified. There were two posted notices, but the traffic flow does not allow the citizens to stop their vehicle safely to read these notices.

The County of Fairfax letter dated May 5, 1969, references the purchase of additional land and a second building allowing a total of 330 students at this site. It notes a change from the original plan for 400 students. There were never any facilities available to accommodate the 330 students.

Special Exceptions

- 1) The proposed use at the specified location shall be in harmony with the adopted comprehensive plan.**
- 2) The proposed use shall be in harmony with the general purpose and the intent of the applicable zoning district regulations.**
- 3) The proposed use shall be such that it will be harmonious with and will not adversely affect the use of development of neighboring properties in accordance with the applicable zoning district regulations and the adopted comprehensive plan. The location size and height of buildings, structures, walls and fences, and the nature and extent of screening, buffering and landscaping shall be such that the use will not hinder or discourage the appropriate development and use of adjacent or nearby land and/or buildings or impair of the value thereof.**
- 4) The proposed use shall be such that pedestrian and vehicular traffic, associated with use will not be hazardous or conflict with the existing and anticipated traffic in the neighborhood.**
- 5) In addition to the standards which may be set forth, in this Article for a particular category or use, the Board shall require landscaping and screening in accordance with the provisions of Article 13.**

We do not take this Special Exception to be “compatible” with existing neighborhood uses. The associated vehicular traffic will be hazardous and conflict with the existing and anticipated traffic in the neighborhood. The resultant storm water runoff and increase in effluent from the septic operation will cause an unacceptable burden on an area already burdened with increasing flooding and stream pollution. The aesthetic character area will be derogated.

It is extremely difficult to have our comments match and parallel the structure of the County document. At times our comments may seem to have an air of redundancy, but some County statements used in their Report required a re-statement of previously used information, experience and observation by the reviewing participants. Many of the issues cross over several subject areas and need to be re-stated.

Observations:

- ***For the most part, the maps and figures attached to the report, listed as items 1 through 15 on the sheet index, are meaningless. Most of the maps and figures are complete illegible, making review and comment very difficult. The project should not be allowed to proceed until the public is provided with meaningful and useful documentation from which to make an assessment.***
- ***A useful plan of the proposed construction is not provided anywhere in the report. It is impossible to review the report without a clear understanding as to the nature of the project. The Special Exception Plat does not provide useful information regarding the specific planned construction. For example, there are items labeled "Reserve." Based on other sections of the plan, it appears that these items are reserve septic fields. It is unclear if these are existing or are new construction. Also, because of the poor quality of the plan, one cannot clearly identify new parking lots, buildings, etc.***
- ***Because of the poor quality of the three plans for construction on Popes Head Road (Popes Head Road Plan & Profile, Popes Head Road Sight Distance Plan & Profile) one cannot accurately determine the exact proposed modifications to the road. However, from what one can determine from these plans, it appears that little consideration was given to the impacts of the increased traffic load associated from the school expansion.***
- ***The proposed Landscape Plan is completely illegible.***

- **Description of Application, Page 1.** The plan frequently discusses a reduction in allowable students from 605 to 500 (see also *Description of Application, Page 9, Location*). This comparison is flawed in several ways. First, no documentation is provided showing a current capacity of 605 students. The permits presented (Appendix 4) show only a permitted capacity of 355 students. Page 2 of the *Description* lists a series of approvals, but there is no indication of what was actually constructed. Nor do the numbers add to 605. The plan references a 1984 permit; this permit is not provided. Also, when evaluating impacts on traffic, stormwater, and flooding, the potential capacity is not at issue. For traffic, one must look at current conditions as compared to expected conditions. When evaluating stormwater and flooding, one needs to evaluate the current site conditions to the planned construction. One other concern is that the Applicant is combining two schools that have a current combined enrollment of 900 students, but is only proposing to house 500 students at the expanded site. There is no discussion as to what will happen to the other 400 students currently enrolled in the school. Who will be responsible for verifying that only 500 students are attending the school after construction?
- **Description of Application, Page 1.** The requested amount of square feet is 111,431 on Page 8 the request is 114,431 square feet. A representative of ISA stated that 15000 square feet is the size of the current two main buildings. One will be demolished and the other will be renovated. In either case the request seeks a ten (10) fold increase in square footage. The two story building (with basement) will cause a much higher increase in compression to the soil on top of the hillside. The result is faster runoff above and below ground. Sixty percent of the new main building will be forward of the building it is replacing.
- **Description of Application, Page 2.** The soccer field was created without a permit and the direction of the stream was changed. This has blocked the course of the natural stream that was on the property and caused additional runoff and flooding, and affected the quality of the water. There are no plans to move this soccer field but it is within the 100 feet of Chesapeake Bay water shed perennial stream. This soccer field should be relocated to comply with the regulations.
 - It is noted that three smaller streams converge into the southern primary stream behind the property. The streams are serviced by two ponds that affect flooding of the properties. The ponds are spring feed and are not intermittent, but perennial.
 - The background information provided is confusing and could be erroneous. The number of students do not track with the buildings built on the property.
- **Description of Application, Page 3.** The first bullet states that the application approvals run with the land. Has that been verified?
- **Description of Application, Page 3.** Item number 2 lists three conditions that should be met for approval. The second, "The use is of a size and scale that will not adversely impact the character of the area in which it is located;" has not been met because of impacts on flooding and stormwater quantity and quality. The third, "The use is designated to mitigate impacts on the water quality of the Occoquan Reservoir." This condition has not been met because the plan does not adequately

address water quality impacts associated with phosphorus, nitrogen, and sediments. Therefore, this project should not be approved.

- **Water quality is the primary focus for the affect Popes Head area. In Appendix 5 the water quality issue is not addressed in detail. The additional runoff will take the shoulder off Popes Head Road. The building footprint will increase significantly. Why were the three bio filtration trenches that were originally proposed removed? What study has been done regarding the impact of the building and the additional flooding issues that could occur on the surrounding neighborhoods? The current property now causes flooding and a larger building footprint will make this problem worse.**
 - **There are serious and detrimental impacts to the neighborhood. It appears the special exception approval process was not rigorous.**
 - **The proposed use has changed from general education purposes. There are additional uses and hours proposed for after school activities. There are proposed 4 nights until 10pm and 2 nights until 11pm and two weekends every month. The extracurricular activities will no doubt impact the traffic patterns as the participants and spectators will be arriving in their own vehicles.**
 - **Every high school with a large number of students raises the noise level in the area; hence, the quiet enjoyment of person's residence and property can be effected adversely.**
 - **Used chairs and other debris from the ISA property are disposed of in plain view of the surrounding neighborhood properties.**
 - **History shows that the property is not well kept. The fence has not been painted, aging trees have fallen and not removed, the grass has not been cut for prolong periods. Large tree stumps are all over the front of the property. During the past year, a lot of improvements have now been made in anticipation of this change. Are there any guarantees that the property will be properly maintained in the future?**
 - **Number of voting taxpayers quality of life are being detrimentally affected for the benefit of a non-tax paying entity.**
 - **There will be no showers or cooking facilities. If meals are to be brought in, then there will be additional traffic.**
 - **Soccer field may be replaced by a "turf" field. What would the rubber base do to the water quality?**
 - **What is the purpose of the Cellar - 38,000sq ft? Will activities be undertaken there.**
 - **There is a lot if impervious building space, Bldgs 1, 2 and 3, 111,000 sq ft. plus 12,000 sq ft for court space and play ground, plus 50,900 sq ft of additional parking spaces. Where will the water flow? There are only three infiltration trenches and that will not accommodate the water flow**
- **Description of Application, Page 5. Based on the sizes of buildings described on page 5, there appears to be quite a substantial increase in the building area. It's not clear if there is an existing Building #1, and if so, what its size is. But according to the numbers on page 5, the project envisions a new 103,000 sq foot building in addition to**

the current 8,431 sq foot of the other two buildings. Is the new building space more than sufficient to accommodate 500 students such that the school could, in the future, propose to expand the school to 900 students?

- ***Description of Application, Page 6. The plan envisions 129 car spaces. With 80 staff, this leaves 49 spaces for students and visitors. With 500 students, there will be approximately 40 kids per grade level, meaning 80 kids at the junior and senior high school (i.e., driving) level. While the plan states that busing will be provided for all students, it acknowledges the some students will drive. It is my understanding that at the current Alexandria campus, there are concerns with parking. If there are more than 49 non-staff (students and visitors) driving to the school, there will not be sufficient parking. It is likely that students would park along Popes Head Road, which would pose a significant traffic.***
- ***Description of Application, Page 7, Stormwater Management. The first bullet identifies conservation easements. It is unclear if these are existing, or if anything is actually proposed. Based on visual observations of the current site, it appears as if the plan is simply taking credit for existing conditions and is not adding anything with these easements to help mitigate increased stormwater runoff. The second bullet on this page discusses in general the infiltration trenches. See the previous comments on the lack of specificity of these trenches, and the likely inability of the trenches to fully mitigate increased stormwater runoff.***
- ***Description of Application, Page 7, Septic System, Page 12. The project envisions constructing three sets of new septic fields. Most of the fields are near the property boundaries as well as the streams that surround the site. While the plan states that generally “the more interior fields are designated as “active” while those fields closer to the property boundaries are designated as “reserve” (to be used only if active fields fail)” all of the fields are in close proximity to the streams. The site is on soil that is designated as sufficient for percolation; however, beneath that soil is a layer of clay and below that rock. If the septic fields fail, the waste will likely rapidly flow to the streams and thus to Popes Head Creek. The Creek is currently listed by the Virginia Department of Environmental Quality (DEQ) as impaired for escherichia coli (e. coli), a source of which is, per DEQ’s web site, “Sewage Discharges in Unsewered Areas.” In other words, failing septic systems contribute to the e. coli impairment. According to Appendix 8 of the Staff Report, the septic system has been designed to dispose a maximum of 6,800 gallons per day of sewage, which is equivalent to slightly less than 12 gallons per day per person (500 students plus 80 staff). It is assumed that this reflects both the “active” and “reserve” septic fields. In one of the public meetings, it was stated that the applicant estimated that 3,770 gallons per day of sewage would be generated, which is equivalent to 6.5 gallons per day per person.***
 - ***Guidance on septic system design recommends designing based on 60 gallons per day per person. While the application notes that there will not be showers and cooking facilities on site, no documentation is provided as to how the applicant arrived at 6,800 gallons per day as being sufficient, especially considering that there will be after-school activities occurring as late as 11pm (see Page 2, bullet number 8, in Appendix 1). Even at the estimated numbers, the school will generate over one million gallons per year of sewage. Appendix 8 states that “Health Department approval of the project will depend on the final number of students and faculty proposed, the planned use of the expanded***

facilities, and the approved designs for the water supply and sewage disposal systems.” Based on this statement, it appears that the Health Department has not approved this project. Because of the significant nature of this project, the proximity of the septic fields to the surrounding streams, and the significant ramifications if the septic fields fail (one million gallons, plus, per year of sewage), this project should be approved by the Health Department before it is allowed to proceed. Many of the surrounding neighborhoods have small children that play in Popes Head Creek and the tributary streams; we do not want to see these streams awash in sewage resulting from a failed septic system.

- **In addition to the concerns outlined above, there is no indication that the septic system has been designed to specifics defined in the Fairfax County Code Section 68.1. For example, the code requires a minimum of 20 feet between septic fields; based on the drawings it is unclear as to if this condition has been met. The code also precludes septic systems on grades of greater than 25%. Based on the topography, it is unclear as to if this requirement has been met.**
- **Description of Application, Page 8. The proposal states the building will be screened from direct line of site from Popes Head Road and from adjacent properties, however analysis based on the land topography and the building height shows that the structure will rise 95 feet from Popes Head Road. There will be no vegetation that can possibly buffer that from the side or from the side. This is not aesthetically compatible with the community and contradicts the impact of the scenic byway. This will not be compatible with surrounding homes and could adversely affect property values.**
- **Will there be chemistry labs in the facilities? How are the chemicals to be disposed of? It could pose serious threats to the septic field and water quality of surrounding streams.**
- **The comprehensive plan recommends that such uses be oriented to an arterial street. Route 123 is 1100 feet away from the ISA. Because of its close proximity to the arterial street there will be traffic gridlock between the ISA and Route 123. There is one entrance to the NVRPA on Popes Head Road very close to route 123 and their hours are the same as the school hours. Peak commuter hours run from about 6:15 to 9:00 am which and 2:30 for school dismissal and up to 7:00pm. These hours coincide with the proposed school hours.**
- **Where is the “turnaround” area for vehicles that inadvertently enter the ISA property as described in the staff report.**
- **The report stated that bus transportation will be utilized for all students and that a small number of students will drive. We believe that a significant number of licensed students will drive their personal vehicles adversely affecting traffic. Many juniors and seniors will not ride a school bus. Parking in the neighboring communities could become another concern.**
- **The Occoquan basin study was to establish a low land use density as the primary water quality protection mechanism. This is, in no way, a low land use project.**

- ***There are no other structures on Popes Head Road except for buildings that have been grandfathered in. This is a residential area and further development of grandfathered properties are not compatible with the residential nature and zoning of the community.***
- ***The intensity of the proposed use should not result in significant impact on the surrounding area. We take issue with this statement. The proposed site will significantly impact the surrounding area visually and environmentally. Traffic will be highly impacted and an increase in accidents is anticipated. The adverse effect on water flow and water quality must be considered a major impact.***
- ***The county has no storm water management program. There are no funded program although there is a staff.***
- ***Barrier waiver- Beech Ridge. We disagree with the barrier waiver on Beech Ridge Road. There should be a wildlife friendly barrier that is acceptable to the adjoining neighborhood.***
- ***Residents along Popes Head Road have experienced the aftermath of many accidents on Popes Head Road. Most of the accidents do not involve the police and are not reported anywhere.***
- ***Description of Application, Page 9, Land Use Conclusion. This paragraph includes several misleading statements and an invalid conclusion. First, the description states “this application represents a reduction in the permitted enrollment.” While technically correct, this statement is extremely misleading. As stated above, this project represents in increase in enrollment from 200 to 500 students. If the facility truly were capable of handling the purportedly permitted 605 students (again, no documentation is provided for the 605 permitted number), then why does the facility need such a substantial expansion to handle fewer students? When evaluating impacts on traffic, stormwater, and flooding, the potential capacity of 605 is not at issue. For traffic, one must look at current conditions as compared to expected conditions. When evaluating stormwater and flooding, one needs to compare the current site conditions to the planned construction. Second, the description states that the application “will include a number of use restrictions and environmental conditions...that are not currently imposed on the site.” As discussed earlier, the proposed stormwater mitigation plans are not adequate to prevent adverse impacts on flooding and water quality. As such, we do not agree with the conclusion that the “application is in harmony with the land use recommendations of the Comprehensive Plan.”***

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TRAFFIC IMPACTS

- ***Popes Head Road is a two lane road with curves and hills which has become a major short cut for vehicles traveling East and West between the Fairfax County Parkway (Route 7100) and Ox Road (Route 123). Popes Head Road is already congested during peak traffic periods in the mornings and afternoons with residents in the area, commuters and Fairfax County school buses.***

- ***The ISA proposal for accommodating five hundred (500) students on their campus on Popes Head Road requires the transportation of 500 students plus ninety (90) staff to and from the ISA campus. The concentration of such a large amount of traffic on Popes Head Road during the periods from 7 to 8 am and from 3 to 4 pm will impose excessive amount of traffic (an estimated 300 vehicular trips in the morning and 200 in the afternoon) to already high volume traffic on this two lane road. In addition to the traffic load, we are deeply concerned that this will create an even greater safety issue on a road that has serious line of sight (blind traffic spots) and other issues. We are aware that a private traffic study done on October 25, 2007 is being used in part by Fairfax County staff in considering this application. It is critical to note that traffic has certainly increased since that study was conducted with increased traffic on the Fairfax County Parkway (7100). Further, at the time of the study, the ISA had much fewer students located on their Popes Head Road campus. Thus, the added impact of traffic to and from the ISA campus was not apparent.***
- ***In addition to the regular school day traffic, ISA is a member of the Northern Virginia Independent Athletic Conference. This will generate 25-30 ISA hosted athletic events during the school year creating additional traffic with buses and parent attendance/drivers from other schools that extends beyond the typical school day.***
- ***The proposal from VIKA Inc. to provide turn out to and from the ISA entrance will not only cause confusion and traffic hazard to East and West bound traffic on Popes Head Road but will also create unsightly widening of a historic/scenic road that is designated a Virginia Byway.***
- ***ISA extended an invitation for Beech Ridge residents to observe traffic at their current campus in Alexandria, VA (8333 Richmond Hwy), Figure 2. One of our residents visited the site on November 6, 2008 and observed 3 entrances/exits onto Route 1 (marked as 1,2, and 3 on Figure 2) with one of them (marked 1) having a traffic signal to accommodate the ingoing/out coming traffic from the school grounds. Starting at 2:30 PM forty five (45) vehicles driven by parents arrived to pick up students, with three ISA traffic directors assisting using entrance/exit 2. At the end of the school period (about 3:00 pm) seventeen to twenty (17 – 20) buses departed the school grounds exiting at the traffic signal on Route 1 with one ISA person assisting traffic.***
 - ***The parent driven vehicles exited through a back street and then to Route 1 at the next traffic signal. In addition to the traffic from buses and parent vehicles approximately eighty (80) vehicles were counted in the staff parking lots. These vehicles belong to school personnel and contribute to the traffic in and out of the school grounds.***
 - ***From these detailed observations we note that the traffic to and from the ISA Campus on Route 1 is accommodated by a four lane road, three entrances/exits, three access streets and two traffic signals. In stark contrast, the ISA proposal requires accommodating at least the same amount of traffic by a single entrance/exit onto a two lane road in an R-C residential community with no traffic signal.***

- **Waiver for interparcel access. We suggest that this waiver be denied. The Matthey property could be developed in the future. Is it zoned RC? This could have even more impact on the traffic flow.**
- **On the main (Alexandria) campus, there was a maximum queue of 54 vehicles and 13 busses. The afternoon queue was held in four separate queue lines. What are the plans for queuing busses and vehicles into the property? There is a guard station that needs to be cleared and this will exacerbate the traffic already of Popes Head Road and there will be queuing on Popes Head Road.**
- **At the time the TIA study was executed, the ISA enrollment at this campus was minimal, which makes the study irrelevant. (The study was done on October 25, which could have been a teacher work day.?) Yellow caution lights on the road and 25 mph signs are not mentioned in the report but would help the situation. The proposal suggested that there should be a study regarding timing of the signals on Rte 7100 and Route 123, when the enrollment reaches 425 students. VDOT says this is not feasible. They will not change the timing of the lights. Even if a traffic study is implemented, who is paying for the study? The taxpayers, not ISA.**
- **Description of Application, Page 10, calls for extending the right turn lane by 150 feet within a year of obtaining 425 students. That number of students will be reached immediately based on the enrollment at the Alexandria facility. The right turn lane issue on Rt123 needs to be addressed immediately. Although it will cause a more dangerous site for the NVRPA entrance.**
- **NVRPA - workers and trash trucks go in and out of the one entrance off of Popes Head Road between 123 and the ISA property. This will be back tracking up to 123. This occurs during peak times.**
- **The Matthey property hosts multiple events at his property and this has one entrance on Popes Head Road between 123 and the ISA property.**
- **There are 7 homes on Dranes Tavern Drive which is between ISA and route 123. There are over 16 vehicles from this street alone. This road is between ISA and 123.**
- **Description of Application, Page 11, again, the streams are spring fed and are not intermittent or ephemeral. These are perennial streams the Chesapeake Bay requires that there be a 100 foot barrier.**
- **When the soccer field was built and the stream was redirected, this caused a lot of runoff and extreme silt flowing down stream.**
- **No one obeys the speed limit of 30 miles per hour.**
- **Popes Head road has been designated as a scenic byway and it is a minor collector road. The term "oriented to an arterial road" is misused. This special exception permits should be granted only if all the requirements are met.**
- **There are times, around 7:30am on weekdays, that traffic is backed up from the bridge over Popes Head Creek to Route 123.**
- **Popes Head Road has been classified as one of the top 10 dangerous roads in the county.**

- **Description of Application, Page 13.** They will use existing vegetation as screening and they will provide ground level screening. This is inadequate, additional taller trees need to be planted to provide screening all sides for adequate buffering.
- **Description of Application, Page 14,** The general special exception standards require that the proposal be in harmony with the comprehensive plan, that there be a finding of no significant negative impact on surrounding properties, and that safe and adequate vehicular and pedestrian access be provided. Neither one of these points have been addressed. There is severe impact both traffic and environmental effects and property values on the surrounding properties. These standards have not been met and can not be met at that location.
- **The approved use of the site was granted in 1969 and is not relevant today.**
- **Description of Application, Page 15,** The Category 3 zoning standard further require the use to be located with direct access to an existing or programmed public street of sufficient right-of-way and cross-section width to accommodate pedestrian and vehicular traffic to and from the use and recommends, as a general guideline that schools of between 76 and 660 students be located on collector streets. Popes Head Road is deemed to be a collector street (Who deemed Popes Head Road to be a collector street?) and with the proposed entrance and frontage improvements, staff believes that the street is sufficient to accommodate traffic to this site. How did the staff come to this conclusion?
- **The additional standards require that the site be designed to accommodate all pick-up and drop-off of students on site. This standard will not be met. There is guard house that will have the busses and all vehicles queuing for security screening on Popes Head Road.**
- **Description of Application, Page 16, Staff Conclusion:** The existing special permit currently approved provides for only 330 students not 605. The proposed site will be within 300 feet of Popes Head Road. This proposal DOES represent a significant modification to the facilities on the site. The proposed site is basically 10 times larger than the current facility. This is a significant modification.
- **Recommendation: We disagree with the approval of all the waivers other than the Comprehensive Trail requirement.**

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ENVIRONMENTAL IMPACTS

- **The expansion proposed in the ISA application requires extensive clearing of many fifty year old trees to accommodate new buildings, driveways, parking lots, four or**

five septic fields, baseball and soccer fields as well as volleyball and basketball courts. This increases the impervious surfaces. Further, this clearing increases the water shed to two existing creeks/streams which already leave their banks in a heavy rain which affects Beech Ridge Drive as it becomes impassable. Both of these creeks/streams eventually empty into Popes Head Creek then ending in the Occoquan Reservoir. No matter what form of storm water management facilities are incorporated it is our opinion the proposed development will only increase rather than lessen the flow of water in these creeks/streams. As a result there will be more erosion.

- The ISA is proposing changes to the current soccer field. The present location violates the Chesapeake Bay water shed ordinance which requires any improvements to be at least 100 feet from a perennial stream. The previous owner of this property built the soccer field, redirecting the creek/stream to the south backside without the required permit. This caused extensive erosion and silt downstream and remains a long standing concern of our residents. Further changes to this field may further impact this situation.*
- Residents are also concerned about the impact of the changes proposed in this application to the value our property. Congestion in and around our subdivision during peak hours is a deterrent to many home buyers seeking multi-acre residents. Further, the ISA property has not been well maintained, which detracts from our community.*
- The noise level will increase with 500 students. How are we guaranteed that there will be no more than 500 total enrollment? Will there be HVAC cooling fans as part of the building infrastructure? If so what is their operational decibel level?*
- Description of Application, Page 14, General Special Exception Standards, Page 16, Staff Conclusions. These paragraphs include several misleading statements and an invalid conclusion. The paragraphs yet again states “this application represents a reduction in the permitted enrollment.” While technically correct, this statement is extremely misleading. As stated above, this project represents an increase in enrollment from 200 to 500 students. If the facility truly were capable of handling the purportedly permitted 605 students (again, no documentation is provided for the 605 permitted number), then why does the facility need such a substantial expansion to handle fewer students? When evaluating impacts on traffic, stormwater, and flooding, the potential capacity of 605 is not at issue. For traffic, one must look at current conditions as compared to expected conditions. When evaluating stormwater and flooding, one needs to compare the current site conditions to the planned construction. The paragraphs also conclude that the project will result in “no significant negative impacts on surrounding properties.” As discussed earlier, the proposed stormwater mitigation plans are not adequate to prevent adverse impacts on flooding and water quality. Also, the risk associated with a septic system failure is significant, and could result in sewage discharge directly into the streams surrounding the site and further the e. coli impairment of Popes Head Creek. This project should not be approved unless these concerns can be fully mitigated.*

- **Description of Application, Page 14, The general special exception standards require that the proposal be in harmony with the comprehensive plan, that there be a finding of no significant negative impact on surrounding properties, and that safe and adequate vehicular and pedestrian access be provided. Neither one of these points have been addressed. There is severe impact both traffic and environmental effects and property values on the surrounding properties. These standards have not been met and can not be met at that location. The approved use of the site was granted in 1969 and is not relevant today.**
- **Description of Application, Page 15, The Category 3 zoning standard further require the use to be located with direct access to an existing or programmed public street of sufficient right-of-way and cross-section width to accommodate pedestrian and vehicular traffic to and from the use and recommends, as a general guideline that schools of between 76 and 660 students be located on collector streets. Popes Head Road is deemed to be a collector street (Who deemed Popes Head Road to be a collector street?) and with the proposed entrance and frontage improvements, staff believes that the street is sufficient to accommodate traffic to this site. How did the staff come to this conclusion?**
 - **The additional standards require that the site be designed to accommodate all pick-up and drop-off of students on site. This standard will not be met. There is guard house that will have the busses and all vehicles queuing for security screening on Popes Head Road.**
- **Description of Application, Page 16, Staff Conclusion: The existing special permit currently approved provides for only 330 students not 605. The proposed site will be within 300 feet of Popes Head Road. This proposal DOES represent a significant modification to the facilities on the site. The proposed site is basically 10 times larger than the current facility. This is a significant modification.**
- **Recommendations: We disagree with the approval of all the waivers other than the Comprehensive Trail requirement, as conditioned.**

Storm Water

- **The three items regarding stormwater – the SWM Checklist & Outfall Description, the Conceptual Stormwater Management Plan, and the SWM/BMP Computations & Details – are very difficult to read.**

- ***Proposed stormwater management plans (the comments herein also address Description of Application pages 10 through 12, and parts of Appendix 5). Popes Head Creek is listed by the Virginia Department of Environmental Quality as being impaired for Benthic-Macroinvertebrate Bioassessments caused by “Post-development Erosion and Sedimentation, Streambank Modifications/destabilization, and Urban Runoff/Storm Sewers (see VA DEQ 2008 Impaired Waters, Category 4&5 by Location, cause group code A23R-02-BEN, Popes Head Creek). The area around the school is also currently impacted by flooding issues. Based on the stormwater management diagrams and the information provided in the Description of Application and Appendix 5, the impacts of the project on flooding and water quality that will result from the project have not been adequately addressed, and therefore this project should not be allowed to proceed unless there are plans in place to assure that there will be no increased stormwater runoff associated with this project. These impacts are associated with increased stormwater runoff from both the school and Popes Head Road that would result from this project. There are two major issues with the increased stormwater flow associated with additional impervious area resulting from the school expansion: stormwater quantity and stormwater quality.***

Stormwater Quantity. Popes Head Road has frequent flooding issues. During large storms, parts of the road become inundated not only with large amounts of water, and eroding marine clay, rolling (East to West) down a road with a 10 degree slope. This is a very hazardous and unsafe situation. This is particularly true at the bend in the road across from Beech Ridge Drive. After rain events, there is frequently severe pooling that occurs at this bend, resulting in unsafe driving conditions as west-bound cars veer into the east-bound lanes to avoid the puddle. Because of the site topography, the stormwater flow at this bend will increase because of both the construction at the school and the addition of turning lanes on Popes Head Road. There is also flooding in the Beech Ridge area. There is no discussion whatsoever of what impacts the additional impervious area at the school and on Popes Head Road will have on stormwater and flooding. It does not appear that anyone as run a stormwater runoff model to evaluate the impacts and identify solutions to mitigate the impacts on the quantity and intensity of the stormwater runoff associated with this project. The plans describe infiltration trenches, but there is no discussion of how these trenches were sized, or even if they have been sized at this time. There are very general statements that the trenches will meet the 50% phosphorous removal target at a half-inch storm, implying that the trenches will only be able to mitigate up to a half-inch storm. Because Fairfax County frequently gets storms greater than one-half inch, (in this area of the country, there are typically eight to ten storms per year greater than one inch) designing for this size storm is wholly inadequate.

There is no backup documentation to support the design and sizing of the trenches, nor is there any information on the effectiveness of these trenches on stormwater quantity. It is likely that in most significant storms, the trenches will be ineffectively

for stormwater control. The plan states that the Best Management Practices (BMPs) will be reviewed and approved by the Department of Public Works Environmental Section (DPWES), but this project should not be allowed to go forward until these plans have been approved by DPWES. Doing so would be completely premature. In its review DPWES must ensure that this project will not exacerbate to any degree the flooding issues along Popes Head Road.

In the plan, there is no discussion of any other stormwater control options that were considered. The facility should be required to install “Green Infrastructure” solutions such as pervious pavement, rain gardens, green roofs, etc. There is no discussion of the options that were considered and the potential effectiveness. The infiltration trenches alone will not be adequate. These trenches appear to be designed to capture the first inch of rain. Even this level of performance is dubious, given that there is no documentation on the sizing and the design of the trenches. However, the school should be required to have no additional impact on stormwater runoff, and should thus be required to mitigate stormwater runoff from at least a ten-year storm (standard design practice in construction) given the already existing flooding concerns on Popes Head Road.

The plan includes photos of the current stormwater outfalls. Because of the poor photo quality, these photos are not meaningful. There is no discussion in the plan, nor does there appear to be any consideration, of the impacts of the increased surface water runoff from the site and the capacity of these outfalls to handle that flow. The plan states that outfall drainage is stable and will be vegetated; however, will the drainage continue to be stable with increased volume and intensity of runoff from the site? One needs to look no further than along the sides of Popes Head Road to see the erosion caused by the existing stormwater conditions; additional stormwater flow will only increase the erosion.

Before the project is allowed to proceed, the public should have the opportunity to review specific designs and plans for stormwater control, including the design basis and all the options considered. Given the current flooding situation in the area, and the impact of the flooding on the safety of Popes Head Road, the stormwater control plan should ensure that there will be no increase in stormwater from the planned project. The plan should include a detailed monitoring program to ensure that stormwater management controls are maintained and functioning properly. The plan should also include a contingency if the planned controls are ineffective.

Stormwater Quality. Fairfax County monitors Popes Head Creek for phosphorus levels, and based on discussions with the field technicians (per Mike McNeil), the phosphorus levels in the creek have risen significantly in the recent past. The

phosphorus is associated with stormwater runoff from fertilized lawns. As can be seen by the area topography, the proposed site sits on an elevated area that is surrounded by two small streams, both of which feed Popes Head Creek. Stormwater from the site will drain into the small streams and then to the Creek. The expansion plan includes infiltration trenches designed to remove 50% of the phosphorus loading; however, there is no documentation to support that this reduction is realistic. The school should be required to run a stormwater runoff model for the design of these trenches, and this should be reviewed and approved by DPWES prior to approval of this expansion. The plan also does not include any post-construction monitoring requirements to verify that the 50% phosphorus reduction is achieved. In reviewing stormwater plans throughout the country, my colleagues and I have found the most BMPs fail unless there is proper maintenance, and a robust monitoring program is required to ensure that this maintenance occurs and is effective. If the trenches fill up with debris, they will not be effective. Therefore, the school should be required to implement a phosphorus monitoring program to verify 50% reduction.

The plan only discusses phosphorus. However, nitrogen and sediments are also frequent stormwater pollutant parameters of concern. Phosphorus is generated by runoff of fertilizer; nitrogen is also a component in fertilizer, typically in comparable amounts as phosphorus. Sediments also cause significant problems in downstream locations and can exacerbate flooding issues. Both nitrogen and sediment mitigation should be addressed in the plan.

In addition, the plans include parking spots for 25 buses. It is my understanding the ISA owns its own buses, and it is likely that these buses will be housed at the school. In addition to substantially increasing the impervious area to accommodate the buses, these buses will have a detrimental impact on stormwater quality. Buses frequent have oil leaks onto pavement that runs off into the stormwater. The plan does not include any discussion of how the discharges of oils and grease will be prevented. In addition, it is likely that the school will perform some maintenance activities on the buses in the parking lot, generating hazardous materials, metal-bearing wastes, and used oils. This is not discussed anywhere in the plan. The impact of housing 25 school buses should be further discussed and plans need to be presented on how these impacts will be mitigated and oil prevented from entering the Storm water.

Appendix 1

- **School related activities – What are school related activities? These activities will cause additional traffic and noise from this property. Traffic coming in and out of the facility will cause more hazardous conditions on Popes Head Road.**
 - **More trees are required on the West end of the soccer field, if it remains in its present location.**

- *Prescribed grounds maintenance prescribed are unenforceable and the applicant has a history of not maintaining its property.*
- *Proposed Development Conditions, Items 18-26, Environmental Conditions. These items focus solely on trees and vegetation issues. There is no discussion of stormwater quantity and quality mitigation. This section is deficient in this area.*

Appendix 2 WHO IS THE APPLICANT: What Corporation?

Appendix 3

- *ISA has science as part of the curriculum.*
- *ISA view its relationship with the community as vital to the schools mission. However, this proposal is in direct opposition to that statement.*
- *Access to this facility should be on an arterial street, not oriented towards an arterial street. There are significant safety issues on Popes Head Road as the collector street to the arterial street.*
- *Size and scale of this proposal is significant.*
- *Water quality is a great concern.*
- *The special exception requirements have not been met*

Appendix 5

- *Land Use Analysis & Environmental Assessment. These comments are in addition to those discussed above regarding the adequacy of the proposed BMPs to mitigate stormwater issues.*
 - *Page 3 – Objective 2 Policy j in the Comprehensive Plan requires low impact development (LID) techniques. The applicant failed to consider any LID techniques (e.g., pervious pavement, green roofs).*
 - *Page 7 – The third full paragraph on this page states: it appears that the applicants have made a significant effort to overcome some of the staff’s initial concerns regarding the proposed development of the subject property. As such, staff concludes that the application is in harmony with the land use recommendations of the Comprehensive Plan.” This is the first and only mention of staff concerns about the project. Where is the record to document the concerns and the steps taken to address those concerns? As noted elsewhere, we believe that the applicant has failed to address stormwater and flooding issues.*
 - *Page 8 – The Resolution states that impacts to the Occoquant Reservoir will be mitigated by the 50% undisturbed open space. We disagree that this will be sufficient to mitigate impacts from increased stormwater. These impacts will result from increased stormwater flow and intensity, and also from poorer stormwater quality due to increased phosphorus, nitrogen, and potential oil and grease loadings.*

- **The low density residential area does not mean 111,400 sq ft structure in a residential area. This adversely affects the character of the area.**
- **The streams on the property are critical to the Occoquan water shed. This proposal has a major effect on the water supply overlay protection district and impacts the water quality on the Occoquan reservoir.**
- **While neither of these streams is designated as a Resource Protection Area (RPA) or Environmental Quality Corridor (ECQ) they are deemed to be headwaters streams subject to protection under the Comprehensive Plan. The site is zoned R-C and is within the Water Supply Protection Overlay District (WS).**
- **The facility is oriented to a collector road not an arterial road. This facility will cause a major change in traffic on Popes Head Road.**
- **We take exception to all the land use citations.**
- **The objective 2 of the Fairfax County comprehensive plan to prevent and reduce pollution of surface and groundwater resources has not been examined with due diligence. There is abundant evidence that water quality and the marine environment in the Bay are deteriorating, and that this deterioration is the result of land use activities throughout the watershed. This proposal is for more land use activities which will accelerate the deterioration of the marine environment.**
- **The property is in an RMA area. Development is permitted in RMA as long as it meets water quality goals and performance criteria for these areas. Due diligence has not been exercised in this area.**
- **While the property is not in an EQC, it is adjoining to properties that are designated EQC and wildlife habitat, connectedness, aesthetics and pollution reduction capabilities will be adversely affected.**
- **Objective 10: Conserve and restore tree cover. Removal of mature trees and replacement with saplings will cause more water flow and increase flooding which will be detrimental to the surrounding neighborhoods.**
- **Compatibility. The proposal is not compatible with the surrounding low density residential area. The building will be very visible from Popes Head Road and no amount of screening will hide it. Noise, vehicle traffic and visual impacts of the proposed parking lot and building mass APPEAR to be adequately mitigated. Appear to be, was there due diligence here?**
- **Were there any noise studies? Noise decibels will increase and there is nothing in the proposal to abate this issue.**
- **Page 7. Barriers are ANTICIPATED to effectively screen the proposed school and related facilities from existing surrounding uses. ANTICIPATED...? Again, was there due diligence here?**
- **While the use, intensity and character of the proposed uses at this location are not residential, it appears that the applicants have made a significant effort to overcome some of staff's initial concerns regarding the proposed development of the subject property. As such, staff concludes that the application is in harmony with the land use recommendations of the Comprehensive Plan. EFFORT DOES NOT EQUAL**

RESULTS. *The application is not in harmony with the land use recommendations of the Comprehensive Plan.*

- *Page 8. With respect to the subject property, the Comprehensive Plan recommends that such uses “be rigorously reviewed” and states that these uses should be approved only if certain conditions are met. We don’t feel the application has been rigorously reviewed and the conditions have not been met to grant this exception.*

ADDITIONAL CONCERNS

- *Additional Concern. Section 107-1-1 of the state code states that it is: “Unlawful to construct or grade in certain problem soil areas without compliance with applicable requirements of this Chapter, Subdivision Ordinance and Zoning Ordinance of this Code.*

(a) It is hereby determined by the Board of Supervisors that grading and the construction of any building, or structure on land containing problem soils is potentially injurious to the health, safety and welfare of the public and that no such construction or grading shall occur until adequate safeguards have been taken.

(b) It shall be unlawful for any person to grade, construct or to perform any foundation related work on any new building or structure or to add to the exterior dimensions of any existing building or structure on land containing problem soils without first complying with the applicable provisions of this Chapter, the Zoning Ordinance, the Subdivision Ordinance of this Code and any applicable Federal or State Regulations. (17-75-17; 1961 Code, §§ 7-2 and 7-3; §§ 15.2-2241-2246; 15-02-107.)

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Problem Soils are defined as: "marine clays" and other associated landslide susceptible soils, shrinking and swelling clays, soils with high water table conditions, soils containing hazardous material, buried waste sites, uncompacted and/or undocumented man-placed fills, earthen structures that would require special precautions for safety during and after construction activity or any other as determined by the Director of the Department of Public Works and Environmental Services."

The site in question includes marine clays, and in all likelihood includes man-placed fills. There is no indication that the applicant considered this ordinance in developing the plan.

Added Notes:

-May 5, 1969, special permit modified use from 400 to 330 Students (not 600).

-Soccer field construction ~ 1983 without permit. Cleared, leveled & disrupted stream. Blocked natural underground sources, blocked water flow and caused run off, silt, etc.

-Violates 100 ft barrier requirement from Chesapeake Water Shed Requirement.

-Student population approval for land claims 605 approved. This was approved at a time when 123 was 2 lanes, no 7100. The County never approved a building to accommodate more than 330.

-Hours 7am-6pm. This is peak hours on Popes Head & allows additional evening hours and weekend hours.