# SHIMP ENGINEERING, P.C. Design Focused Engineering

**Project Narrative For:** Field School of Charlottesville

**Parcel Description:** Tax Map 60, Parcel 68

July 15, 2019 **Pre-App Meeting Date:** 

**Initial Submittal Date:** November 18, 2019

**Revised:** February 18, 2020

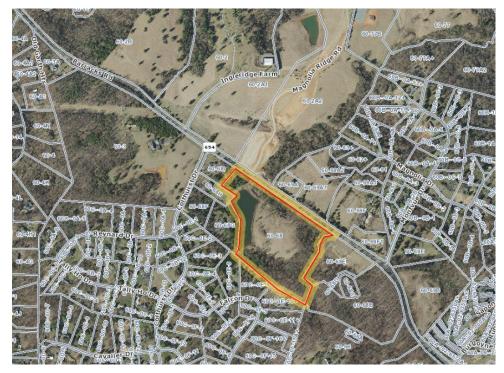
	ACREAGE	EXISTING ZONING	PROPOSED ZONING	COMP PLAN DESIGNATION
TMP 60-68	24.57	* *	Special Use – Private Middle School	Rural Area

# **Additional Zoning Considerations:**

Airport Impact Area (AIA), Entrance Corridor (EC), Critical Slopes

#### **Location:**

This property is located on Barracks Road, 500 feet east of Colthurst Drive and approximately 750 feet west of Montvue Drive; within the Ivy Creek water supply watershed.



# **Project Proposal:**

Field School of Charlottesville is the Owner (the "owner") of tax map parcel 60-68 in Albemarle County, Virginia, a 24.57 acre parcel located off of Barracks Road approximately 500' east of Colturst Drive and approximately 750' west of Montvue Drive (the "property"). The owner requests a special use permit ("SP") to amend the previously approved SP on the property, SP201500024. This amendment, SP201900012, to the approved SP, proposes a revision to the limits of the SP allowing a private school use, from a 24.57 acre area to a 21.00 acre area. The proposed limits of SP201900012 are consistent with a proposed boundary line adjustment with adjacent parcel, TMP 060C0-00-0E-01000. There are no proposed operational or enrollment changes with this amendment request.

SP201500024 was approved with conditions by the Albemarle County Board of Supervisors on March 8, 2017, and permits a private school on TMP 60-68. The proposed boundary line adjustment, which will reallocate 3.57 acres from TMP 60-68 to TMP 60C-0E-10 requires revisions to the conditions of the approved SP2015-24 to ensure that TMP 60-C-0E-10 is not encumbered by the conditions of the special use permit applicable to the Field School property. For example, the general location of the 50' preserved tree buffer "D" needs to be revised from its original location, as shown on the concept plan approved in conjunction with SP2015-24, so that use of the entirety of the proposed TMP 60C-0E-10, which is approximately 6.257 acres, is not inhibited by conditions approved with SP2015-24.

The general site layout approved with SP2015-24 will remain largely unchanged however; there is some reorientation of site elements such as a building and reorganization of a few parking spaces to accommodate a revised reserve drainfield location. The concept approved in conjunction with SP2015-24 shows a primary drainfield and two reserve drainfield locations. With the proposed transfer of 3.57 acres from the Field School property to TMP 60C-0E-10, these necessary site elements needed to be accommodated elsewhere on the site since one of the reserve drainfields is shown within the limits of the area that is to be transferred to TMP 60C-0E-10. The primary drainfield is now shown northeast of the approximate location where it was shown on the SP2015-24 concept and the two smaller reserve drainfields shown on the SP2015-24 concept are now depicted as one larger reserve drainfield area. When looking at the site as a whole, the general location of the drainfields remains relatively consistent with the approved SP2015-24. There are several constraints on the site that limit any drastic relocation of the potential drainfield areas from the SP2015-24 concept, these constraints include areas that have been heavily worked in the past, stream buffer, and critical slopes.

As previously stated, slight modifications have been made to the site layout proposed with this SP request (SP2019-12) to accommodate the revised proposed drainfield locations. The dining hall shown as building "7" on the conceptual site layout has been rotated 90 degrees and moved closer to the proposed travelway and six of the guest parking spaces that were previously shown near the dining hall have been relocated adjacent to the 12 faculty spaces shown near the proposed 2-story athletic building. No additional parking spaces are proposed with this SP amendment, only a reorientation of proposed parking areas to accommodate proposed drainfield locations.

This SP amendment proposes no changes to the maximum building footprint and so consistent with SP2015-24, total building footprint will be limited to a maximum of 30,000 SF and no individual building footprint shall exceed 12,000 SF. Since there are no operational or enrollment changes proposed with this SP request, the parking demands evaluated in conjunction with SP2015-24 remain consistent with this proposal; approximately 15-20 after-school sporting events are expected to take place on the site. It is anticipated that ten paved parking spaces will be required to accommodate daily needs of the students and approximately 10 additional paved parking spaces are required to accommodate school faculty and staff.

20-30 "temporary" parking spaces will accommodate overflow parking, as needed for events. Since only six parking spaces are reoriented in conjunction with this SP request, and these reoriented spaces have been moved further from Barracks road, it is not anticipated that any onsite parking will be visible from Barracks Road. Just as with SP2015-24, it is anticipated that overflow parking will be on grass surfaces, approved with site plan review.

Consistent with SP2015-24, student capacity will remain unchanged, limited to 150 boys, grades 5-8. As previously stated, there are no operation changes proposed with this SP request and so school operations will remain consistent with those approved with SP2015-24; the regular hours of operation will be from 9 am to 4 pm for approximately 170 days of the year and some additional summer school options available. Summer school operations will have substantially the same limitations (time of day, number of students, etc.) as the limitations provided during the regular school year. Summer after school events typically occur immediately after school and are generally completed by 5:45 pm. An additional 10-12 evening school events occur throughout the school year.

In conjunction with SP2015-24, the Board of Supervisors approved a special exception for .85 acres of critical slopes disturbance and a central sewer request. There are no proposed changes to these approvals with this SP request.

#### **Consistency with the Comprehensive Plan:**

A private school use was approved on the property with SP2015-24 and therefore this use has previously been evaluated for consistency with the Comprehensive Plan. The proposed boundary line adjustment, which would remove 3.57 acres from the Field School property, does not alter the nature of the private school use and although the use has been previously evaluated for consistency with the Comprehensive Plan, it is prudent to note the following consistencies with the Comprehensive Plan that demonstrate the Field School embodies several community values as outlined in the Comprehensive Plan:

#### Vision + Values

• Excellent educational opportunities as found in the County's public and privates schools, college, and university

The Field School of Charlottesville offers an excellent educational opportunity in Albemarle County. The Field School is a small private school, dedicated specifically to middle school boys. The school is committed to a lean school model, with its small teacher-student ratio encouraging strong relationships and engagement with their students, and allowing for quick policy and institutional decisions that are made by those who work directly with their pupils. The private school is interdisciplinary, with an emphasis on a 'collective experience' of in-class exercises, special events, and field trips and teachers that educate the student body by subject, not by grade; the school firmly believes that this consistency creates a stable foundation of which their middle school education is able to grow from.

# **Economic Development**

• Promote economic development activities that help build on the County's assets while recognizing distinctions between expectations for the Development Areas and the Rural Area.

A private school offers a unique opportunity for partnership with Albemarle County, where 54% (or \$202 million) of the budget is allocated toward capital and operational costs of schools. It is anticipated that over half of the students at The Field School will live in households in Albemarle County, paying property taxes

toward the Albemarle County school budget. The Field School offers an opportunity to increase the inventory of schools within the County and increase the capacity for students within the public school system, at no additional cost to the County taxpayer.

# **Impacts on Public Facilities & Public Infrastructure:**

The property lies within the Albemarle County Jurisdictional Area for water and fire hydrants are located along the frontage of the proposed school site. The property does not lie within an ACSA sewer service area and therefore the site will utilize on-site drain field locations. The Field School will make any necessary improvements such as the installation of turn lanes to accommodate the private school use and existing road users as required by VDOT within the Barracks Road right-of-way.

The Field School is limited to a maximum enrollment of 150 students and will have an estimated 12 staff members on the property during the day. This property is serviced by the Berkmar Rescue squad and the Seminole fire station.

#### **Lighting/Noise:**

Lighting and noise impacts from the Field School have been previously evaluated with SP2015-24. There are no proposed changes to the lighting and noise impacts from SP2015-24. The following was stated in the application for the approved SP2015-24: outdoor lighting for the school use will be limited to parking and building entrances. No lighting or amplification of noise will be permitted on the athletic fields. Use of the school and school facilities will be limited outside of the hours of the regular school day. The school will enroll boys in grades 5-8 and will be limited to 150 students. The regular hours of operation for the school will be between 9 am and 4 pm for approximately 170 days of the year and some additional summer school options will be made available. Summer school operations will have substantially the same limitations (time of day, number of students, etc.) as the limitations provided during the regular school year.

#### **Impacts to Traffic:**

Since there are no proposed enrollment or operational changes, there are no anticipated additional traffic impacts beyond those anticipated with the approval of SP2015-24.

Below is the narrative describing anticipated traffic impacts that was evaluated during the review of the approved SP2015-24.

The Field School currently enrolls 75 students and is located on Crozet Avenue (S.R. 810) just north of Crozet, Virginia. Attachment A is a study prepared in 2013 evaluating traffic counts and parking needs for the Field School over a one week period during the regular school year. During that week-long study, please note the following: attendance ranged from 65-68 students, daily traffic ranged from 58-62 trips, AM Peak Hour trips ranged from 9-24, PM Peak Hour trips ranged from 4-13, and the maximum utilized parking spaces was 15 car spaces and 2 bus spaces.

Attachment B is a map of Albemarle County showing residential areas (trip originations/destinations) for the existing 2014-15 Field School population. It should be noted that the 18% of the current student population resides in the Crozet area (where the Field School is currently located) and 15% of the current enrollment resides in the Ivy area (where The Field Camp is located). In the new location, it is anticipated that the proportion of students enrolled from the Crozet Area will significantly drop and the proportion of students enrolled from the urban ring of Charlottesville will increase respectively

# Traffic Impacts (continued):

Table 1 below provides an analysis based on traffic numbers generated from similar school projects (such as the Regents School in Albemarle County). The 2013 existing ADT on Barracks Road (S.R. 654) between Old Garth Road (S.R. 601) and Georgetown Road (S.R. 656) is 5,900 trips. This number increases to 21,000 between Georgetown Road and the Charlottesville City limits. Using the figures from Table 1, The Field School currently generates 209 trips per day and at full enrollment (150 students) will generate 419 trips per day.

	Table 1: Field	School Trip Generation w	ith 150 Studer	nts								
Assumed Values**:	Daily traffic multiplier =		2.79	perstudent								
	AM peak hour traffic =		0.9	perstudent								
	AM inbound =		55	%								
	AM outbound =		45	%								
	PM Peak Hour mulitplier =		0.61	per stude nt								
	PM inbound =		47	%								
	PM outbound =		53	%								
Hara Barantakan	St (		5 11 7 60	AM Peak Hour			PM Peak Hour					
Use Description	Size (number of students)	Population Basis	Daily Traffic	In	Out	Total	ln	Out	Total			
Private School (Grade 5-8)	75	current enrollment	209	37	30	68	22	24	46			
Private School (Grade 5-8)	150	maximum enrollment	419	74	61	135	43	48	92			
												<u> </u>
** These values are estimated	ates compiled from various o	nline traffic reports includ	ing:									
	http://ww2.cityofpasadena	net/councilagendas/20099	%20agendas/N	/lar_23_09/6A	%20ATTA	CHMENT%2	02%20PA	RT%204.pd	f			
	http://www.alhemarle.org/	unload/images/Forms Ce	nter/Denartm	ents/Board o	of Superv	isors/Forms	-/Δσenda	/2014Files/	/ng13/ng n	Pagantes	chool Atta	ch A

The 2013 analysis of actual trips provided in Attachment 1 demonstrates that the actual ADT is significantly lower than the design ADT provided in Table 1 above. It is our opinion herein that the discrepancy in these figures is due to the Field School use of bus service and carpooling. Figures provided in Table 1 were originally derived from the ITE Code 534 (private school use (K-8)) which apparently does not consider bus services or carpooling.

Additionally, it should be noted that the proposed school location on Barracks Road is 1 ¼ miles west of the Barracks Road Shopping Center. This proximity to a major retail center will significantly reduce the number of trip originations when considering design ADT. Consider the parent of a student, traveling to a regional service at Barracks Road (Harris Teeter, Kroger, Wells Fargo, CVS, USPS, etc...) will be able to stop by and pick up their child from school on the way home.

As demonstrated in the 2013 study, the peak hours for the school use are between 8:30-9:30 AM and 3:45-4:45 PM. The AM Peak hours would coincide with peak hours of traffic along Barracks Road and a left turn lane may be required for the school use. The site has adequate frontage and sight distance to provide turn lanes as needed.

Barracks Road (S.R. 654) is a major collector road in Albemarle County with a posted speed limit of 50 MPH (45MPH for trucks). Georgetown Road (S.R. 656) is another major collector road in Albemarle County and is located ½ mile from the proposed site. The U.S. 29/250 Bypass is characterized as a "Freeway or Expressway" and is located 1 mile from the proposed site.

#### **Impacts on Environmental Features:**

Below is the narrative describing Impacts on Environmental Features evaluated with the review of SP2015-24. The impacts with SP2019-12 are consistent with those evaluated with SP2015-24 and only minor modifications to the narrative approved with SP2015-24 have been included to account for approved critical slopes disturbance:

During neighborhood meetings conducted with the review of SP2015-24, it was the consensus of neighbors and a science teacher from The Field School that the lake on the property should be preserved along with the existing stream buffer and adjoining wooded slopes along the southern border of the property (see attached application plan). In later meetings with neighbors during the review of SP2015-24, an additional buffer area was requested between the ball fields and the lake to supplement an area with few screening trees. This additional buffer was included in the application plan for SP2015-24 and is still proposed with the SP2019-12 application plan.

Additionally, a landscaped buffer is still proposed along the frontage of Barracks Road.

Some critical slopes will need to be disturbed in order to create the ball fields and school campus. A conceptual design of the school campus is provided, demonstrating how the critical slopes can be addressed with minimal disturbances and these disturbances can be mitigated. A special exception approving .85 acre of critical slopes disturbance was approved in conjunction with SP2015-24.

Grading is proposed for the multipurpose ball field, adjacent to the 100-ft stream buffer, which will not be impacted by the grading. The 3-acre pond will remain within the school property.

Attachment A:

The Field School of Charlottesville

Field Report: Traffic Counts and Parking Needs Study
Observation Dates: January 14 through January 18, 2013

Revision Date: July 29, 2013

Prepared By: The Field School of Charlottesville

#### Vehicle Trips:

Time of Day	Monday 1	/14/2013	Tuesday 1	/15/2013	Wednesday	1/16/2013	Thursday 1	/17/2013	Friday 1/18/2013		Revision Comments
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	
8:00-8:30	1	0	1	0	1	0	1	0	1	0	includes faculty member performing counts
8:30 - 8:45	9	4	9	4	10	5	9	4	10	5	includes estimated distribution of in/out
8:45 - 9:00	9	4	8	4	9	5	9	5	10	4	includes bus in and estimated distribution
9:00 - 9:15	1	1	1	1	1	1	2	1	3	1	includes estimated distribution of in/out
9:15 - 3:45	6	8	5	6	6	7	4	7	2	9	includes estimated distribution of in/out
3:45 - 4:00	4	2	4	2	4	2	3	2	3	2	includes estimated distribution of in/out
4:00 - 4:15	1	6	1	6	1	9	1	6	1	6	includes bus out and estimated distribution
4:15 - 4:30	0	5	0	5	0	2	0	3	0	2	includes estimated distribution of in/out
4:30 - 5:30	0	1	0	1	0	1	0	1	0 1		includes faculty member performing counts
Total Daily Trips In/Out	31	31	29	29	32	32	29	29	30	30	
Total Daily Traffic	6	2	5	8	6	4	58	3		50	

#### Peak Hour Distributions:

Estimated AM Peak Hour Trip Distributions (8:30-9:30)	0	10	0	21	11	21	12	24	11	
Estimated Mid-Day Trip	9	19	9	21	11	21	12	24	11	
Distributions (9:30 - 3:45)	٥	4	6		7	2		,	۵	
Estimated PM Peak Hour Trip	8	4	0	3	,	3	3	2	9	
Distributions (3:45 - 4:45)	13	5	13	5	13	4	11	4	10	

#### **Additional Notes:**

Daily Student Attendance	68	65	68	65	67	
Students riding bus	37	36	37	36	37	
Daily Faculty Attendance	10	10	10	10	10	Includes one teacher driving bus
Students walking/biking	1	0	0	0	1	
Students carpools	5	5	5	4	5	
Weather	clear	rain	rain	rain/snow	clear/cold	
Special Events	none	none	none	basketball cancelled	Open House (9:00 - 11:00)	

#### Parking Analysis:

Faculty in Attendance	10	10	10	10	10	Includes one teacher driving bus
Vehicles Parked at 9:30	11	10	10	9	15	-
Buses Parked at 9:30	2	2	2	2	2	

# Attachment B: Field School of Charlottesville Map of Trip Originations/Destinations for Current School Enrollment (2014-15) prepared June 10, 2015

