

JOHN C. CAMPBELL FOLK SCHOOL
Campus Master Plan



APRIL 2020

wla
STUDIO



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1. PROJECT INTRODUCTION

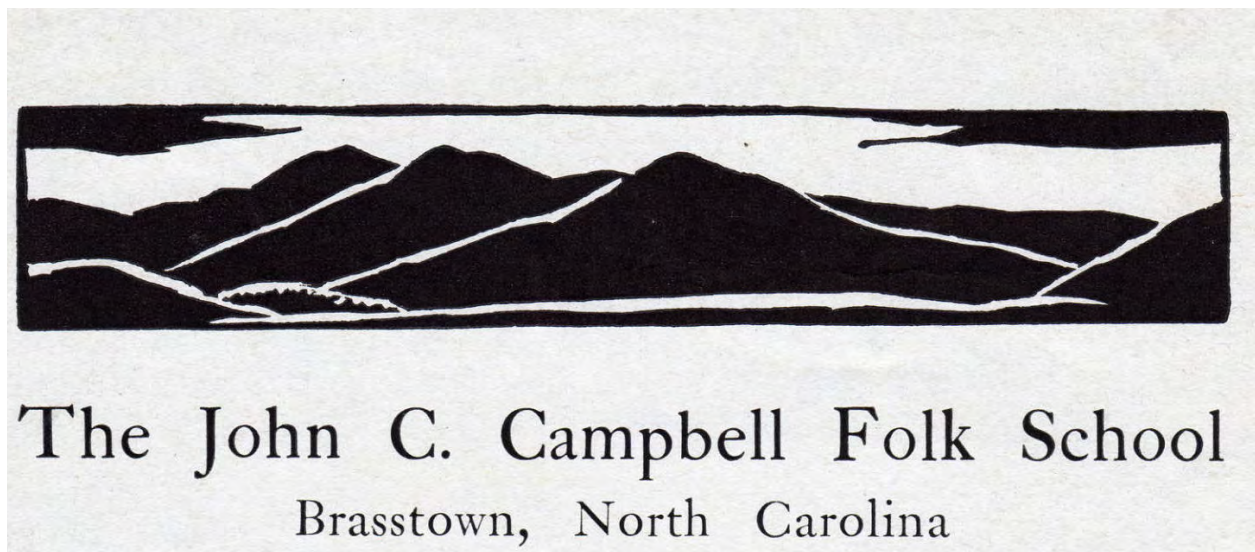
PROJECT INTRODUCTION

BACKGROUND

The John C. Campbell Folk School is located in Brasstown, North Carolina, near the town of Murphy, NC and within Cherokee County. Olive Dame Campbell founded the school in 1925 after the death of her husband John C. Campbell, who was an educator and advocate for the preservation of traditional folk ways. Olive Campbell and Marguerite Butler modeled the school after Scandinavian folk schools the two women studied while traveling in Europe in the early 1920s. The original mission of the school was to provide education and practical training for local residents in western North Carolina. Today, the John C. Campbell Folk School operates as a craft school, offering a variety of classes for students to study under resident artists and artisans.

PROJECT DESCRIPTION

The following document provides John C. Campbell Folk School (JCCFS) with a conceptual plan for the future development of its campus and addresses specific existing issues related to its physical plant. The need for the plan is apparent. Class enrollment has increased, putting pressure on its studio, administration, and residential spaces. JCCFS requires new educational/studio spaces in order to expand popular programs, improve safety, and improve overall instruction quality. JCCFS needs new housing to meet the needs and expectations of its existing and projected clientele. JCCFS can improve overall visitor experience by improving its dining facilities and creating a visitor center. JCCFS can repurpose existing buildings to create new, multi-use facilities for school and community events.



PROCESS

The Master planning process involves the following Key Components:

- Create a base map and inventory of existing conditions;
- Establish principles to guide decision making;
- Engage with staff and stakeholders;
- Develop concepts;
- Refine a preferred concept and prepare final master plan document.



INVENTORYING EXISTING CONDITIONS

The planning team developed a topographic survey of the 270 acres of the campus. Architecture team members evaluated existing buildings, meeting with staff to discuss limitations of individual buildings and general building needs. Civil engineer team members evaluated existing storm water and circulation features. Landscape architect team members evaluated circulation (pedestrian, vehicular, service), the existing landscape including vegetation, topography and the spatial arrangement of structures and site features, and general site furnishings. The landscape architectural firm also served as the prime consultant in this planning effort.

ESTABLISHING PLANNING PRINCIPLES

During the early phase of the project, the planning team met with JCCFS staff to establish an understanding of the school's goals and to develop criteria for evaluating potential changes to campus. The planning team communicated with the Lee Institute, charged with developing the Strategic Plan, which articulates the long-range vision for the Folk School.

The Strategic Plan process recorded staff and students' deep affection for the school's special attributes. The unique natural setting with its rolling terrain and vistas to distant mountains across open fields, and the collection of rustic campus buildings combined with the artistic pursuits of its students creates an idyllic environment. The design of future buildings and landscape features should complement the established aesthetic of campus while improving how the school operates and how students and staff experience campus.

During the planning process, the design team emphasized the following priorities:

1. Align campus development to support Folk School Strategic Plan;
2. Accommodate student, staff, and faculty immediate and envisioned needs;
3. Address known physical and environmental issues to improve functionality of the physical plant;
4. Optimize use of developed areas and conservation of greenspace;
5. Strengthen pedestrian connections to create a pedestrian friendly campus;
6. Encourage preservation of historic resources and preserve the character of the campus' historic setting and association with its institutional history;
7. Improve physical and programmatic connections to surrounding community.



John C. Campbell Folk School Postcard circa 1950

STRATEGIC PLAN

During the development of this campus plan, the Folk School worked with the Lee Institute to develop a strategic plan that articulates the vision, mission, and values of the institution moving into the future. These concepts were shared with our planning team during our development of this campus plan and the plan is aligned with the following principals.

Vision

A community that awakens, enlivens, and enlightens the world.

Mission

The Folk School transforms lives, bringing people together in a nurturing environment for experiences in learning and community life that spark self-discovery.

Values

- **Joy:** We bring originality, creativity and passion to all endeavors – we sing behind the plow.
- **Kindness:** We treat everyone with respect, humility and warmth.
- **Stewardship:** We honor the traditions and spirit of the Folk School as we guide its evolution and preserve it for the future.
- **Non-competitive:** We support and affirm each other in lifelong growth.

Consistent with the planning team's conversation with staff, respondents to the strategic plan surveys identified the beautiful campus as a key asset to the school. Respondents repeatedly commented that the beautiful rural setting and the school's history were among its core strengths. Many respondents recognized the need for the campus to grow and identified a need for facility improvements; but as one respondent stated, "We want to grow but keep our soul."

Community members who attended a listening session commented upon the need to modernize and improve the campus infrastructure while remaining true to the school's historic traditions. Staff and instructors made similar observations, suggesting a need to improve the grounds and modernize studio spaces. Among the specific facility related recommendations found in the surveys was the need to construct a welcome center and café. This building is seen as a way to better serve both students and non-student visitors to campus.

DESCRIBE THE ESSENCE OF THE FOLK SCHOOL



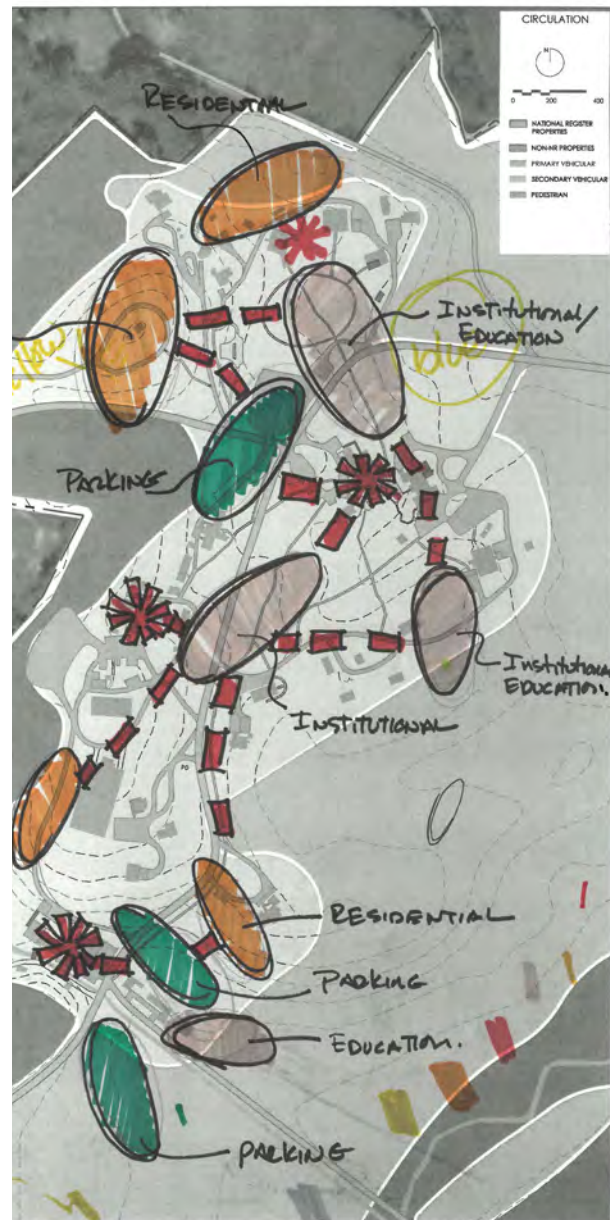
CONCEPTUAL DESIGN

After conversations with staff and reviewing survey data from the Strategic Plan process, team members began developing conceptual designs that illustrate alternative strategies for campus development. These concepts build on the issues and opportunities identified during site visits. These development opportunities are illustrated in graphics presented in their appropriate sections below.

DESIGN PRINCIPLES

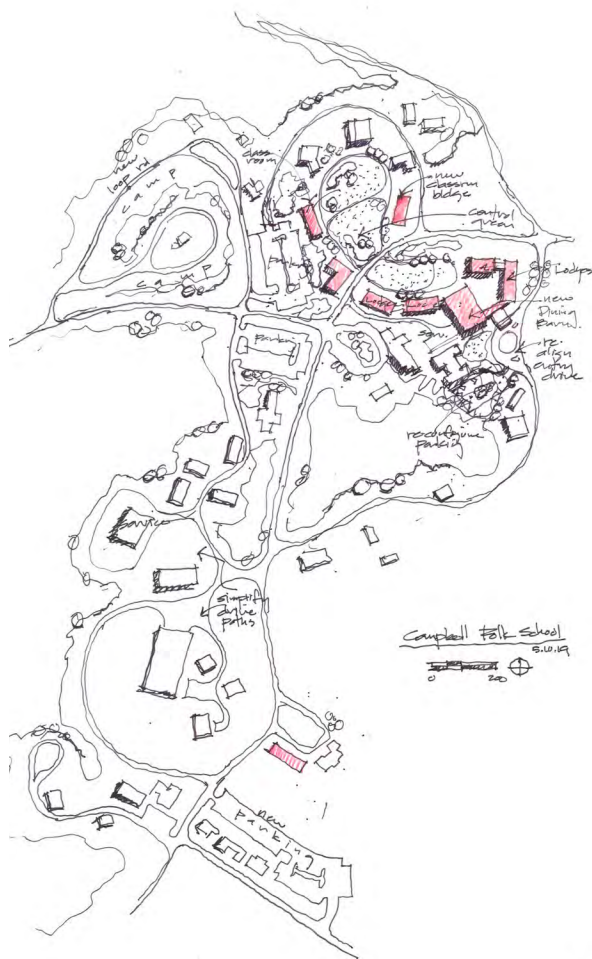
Many of the early conceptual designs strive to reinforce a village atmosphere on campus. Through many early design efforts, several principles developed for the design team.

- Locate new buildings in areas that reinforce the historic patterns of development or reinforce the unique character of existing spaces on campus;
- Enhance the pedestrian experience by creating clusters that include both educational and residential buildings;
- Parking should be centralized and distributed on campus to encourage pedestrian travel during the day;
- Develop landscape areas that connect different areas on campus.



DESIGN DEVELOPMENT

As the design team evaluated different strategies to accomplish the design principles, we generated alternative scenarios with different approaches. These were used to create three-dimensional models so as to visualize the relative massing of buildings on campus.



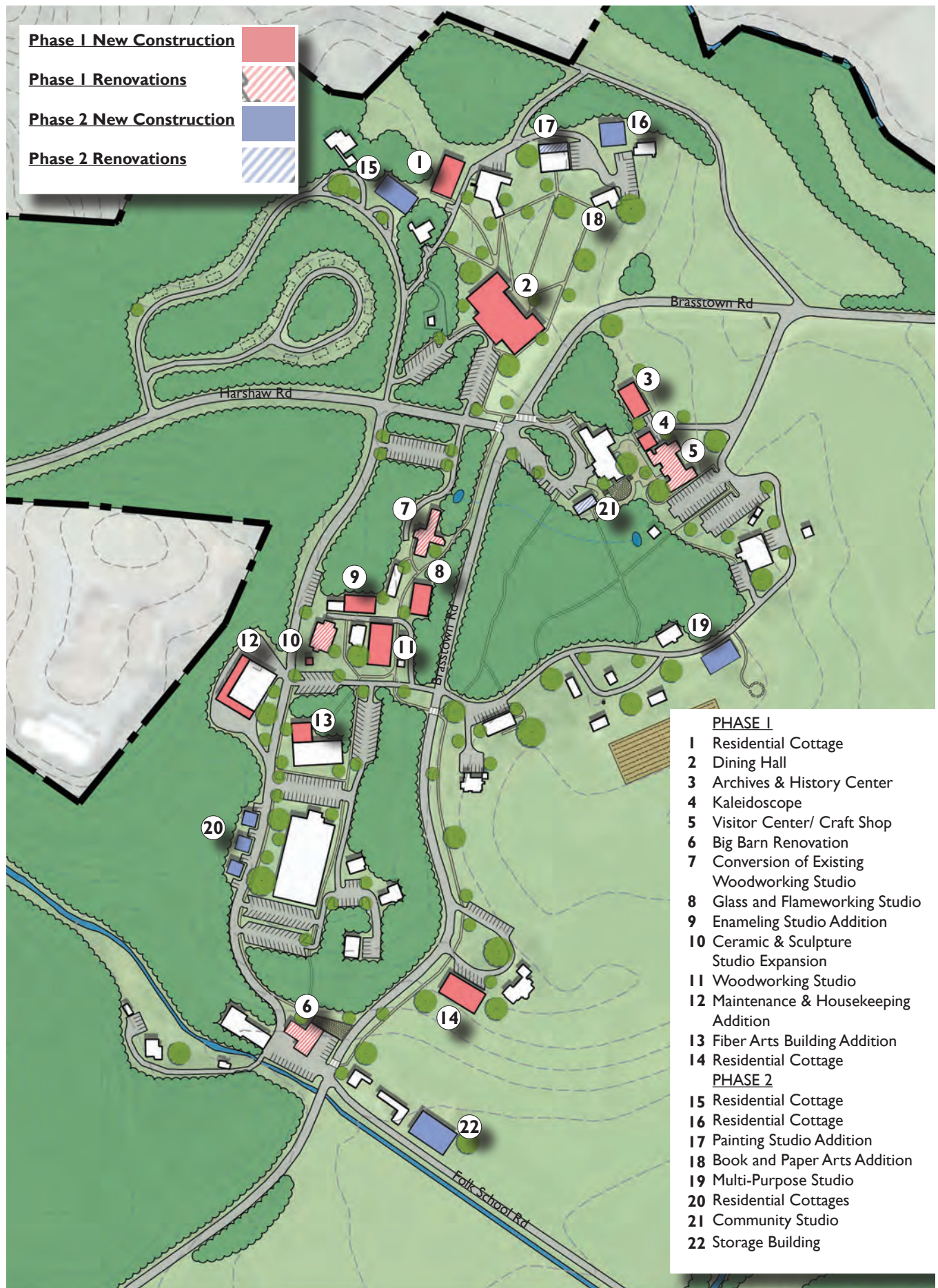
FINAL RECOMMENDATIONS

The following graphic illustrates the consensus reached with the Master Plan committee during the design process. The highlights of the final plan include:

- Construct a new Dining Hall in open field near location of current gravel parking lot;
- Convert existing Olive Dame Dining Hall into the future Visitor Center, with Craft Shop on upper level;
- Construct a Kaleidoscope adjoining the future Visitor Center;
- Construct two eight-unit residential cottages. One cottage near Orchard House and one cottage overlooking field between the Cottage and Woodturning Studio;
- Construct new Woodworking Studio in current location of Sawmill next to Woodcarving Studio;
- Construct an addition onto Jewelry Studio for the Enameling Studio;
- Construct an addition onto Louise Pitman Fiber Arts Building;
- Rehabilitate Big Barn as a Dance Studio/ Special Event space with studio space on lower level;
- Expand parking areas in different areas on campus.

MASTER PLAN OVERVIEW

40,000 sf.	New Administrative Space
15,600 sf.	New Studio Space
24,150 sf.	Renovated Studio Space
47,400 sf.	New Residential Space
400	Total Parking Spaces



HISTORICAL OVERVIEW OF JOHN C. CAMPBELL FOLK SCHOOL

Olive Dame Campbell founded the school along with Marguerite Butler in 1925 to continue the legacy of Campbell's late husband, John C. Campbell.¹ John C. Campbell pursued a career in education before turning his attention to social work in the Appalachian region of the Southeast in the early 1900s. John Campbell sought to preserve the cultural heritage of the mountain region by documenting its social, cultural, and economic conditions. After John's death in 1919, Olive D. Campbell continued her husband's work, completing a project documenting churches and schools in the Appalachian region. In 1922, she traveled to Scandinavia with her friend Marguerite Butler. While there, the two studied Scandinavian folk schools, resulting in Campbell's book *The Danish Folk School: Its Influence in the Life of Denmark*.

Upon their return to America, Campbell and Butler searched for a location to begin a school modeled on the Danish schools. While visiting Murphy, NC, Butler met with Fred O. Scroggs and L.L. Scroggs who led an effort to show widespread community support for the creation of a folk school in their area. Many members of the community pledged their assistance, committing labor, land, and supplies.



Olive Dame Campbell circa 1926

History suggests that the Scroggs family donated 20 or 30 acres of land upon which the campus was founded.² On November 21, 1925, Campbell wrote, "We have been offered a fine tract consisting of roughly twenty-five acres."³ Deeds indicate that Campbell also negotiated with other local landowners. The day after receiving the

1. The historic overview contains information gathered from multiple sources, including M. Anna Fariello, *Craft and Community John C. Campbell Folk School 1925-1945* (Cullowhee: Western Carolina University, 2018); National Register of Historic Places Inventory—Nomination Form John C. Campbell Folk School Historic District, September 1, 1982; <https://www.ncpedia.org/john-c-campbell-folk-school>.

2. Cherokee County Deed Book 89, page 124.

3. National Register Nomination Form, Section 8, Page 3.



Farm House circa 1926

deed for the Scroggs' parcel, Campbell acquired an additional 80 acres from the Hall family.⁴ In October the following year, L.L. Scroggs and his wife sold another five acres to the school.⁵ In December 1926, the school purchased two tracts totaling eighty acres from the Waldroup family.⁶

Campbell and Butler moved to an existing farmhouse on the Scroggs parcel in December 1925. In the early years, Campbell and Butler taught classes in this farmhouse. The first students arrived in December 1927. Classes typically ran from

December to spring to coincide with the season when young adults were not busy working on their families' farms. At first, students came from within walking distance because there was not lodging on campus. On August 18, 1926, school staff laid the cornerstone for a building large enough to board students and to hold classrooms. Originally called the Community House and later known as Keith House, the building's construction stretched over a few years before the first classes occupied the building in December 1928.

4. Cherokee County Deed Book 88, page 547 and Cherokee County Deed Book 89, page 117.

5. Cherokee County Deed Book 89, page 425.

6. Cherokee County Deed Book 96 pages 554 and 555; Tract One is described in Cherokee County Deed Book 70, page 388; Tract Two is described in Cherokee County Deed Book 75, page 504.



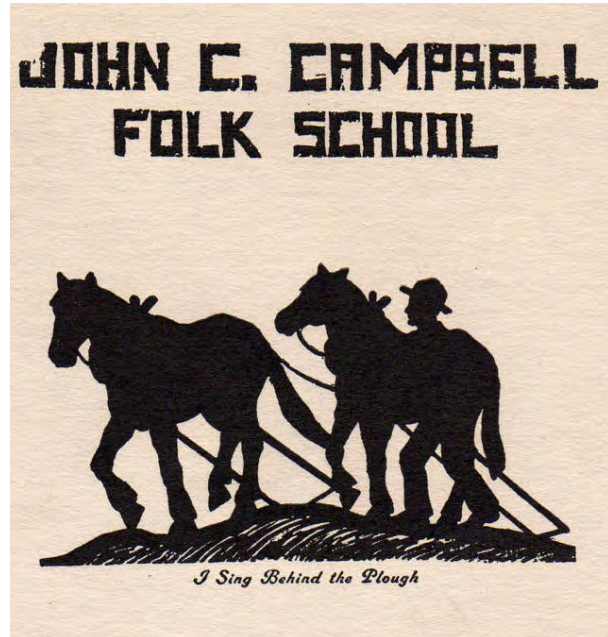
Oscar Cantrell plowing circa 1927

Olive Campbell served as the school's first director until her retirement in 1946. Under Campbell's direction, the school focused on four areas of instruction: traditional performance arts, arts and crafts, natural science and farming, and cultural awareness studies. Classes offered included forestry, history, drawing, music, dance, and public health. By 1928, a picture in the school newsletter shows students weaving, the first evidence of handicrafts in the curriculum.⁷ In keeping with the Danish model, instruction was noncompetitive and no grades were issued.

In May 1926, Georg Bidstrup arrived from Denmark to oversee the farm operations. In June 1926, Leon Deschamps, a forester, farmer, and engineer from Belgium, arrived to oversee the school's facilities. Deschamps helped design and construct many of the early buildings, employing a distinct stone construction method. Park Fisher began teaching short courses on woodworking in 1930. Around 1931, Oscar Cantrell joined the staff

7. www.wcu.edu/library/DigitalCollections/CraftRevival/people/olivecampbell.html.

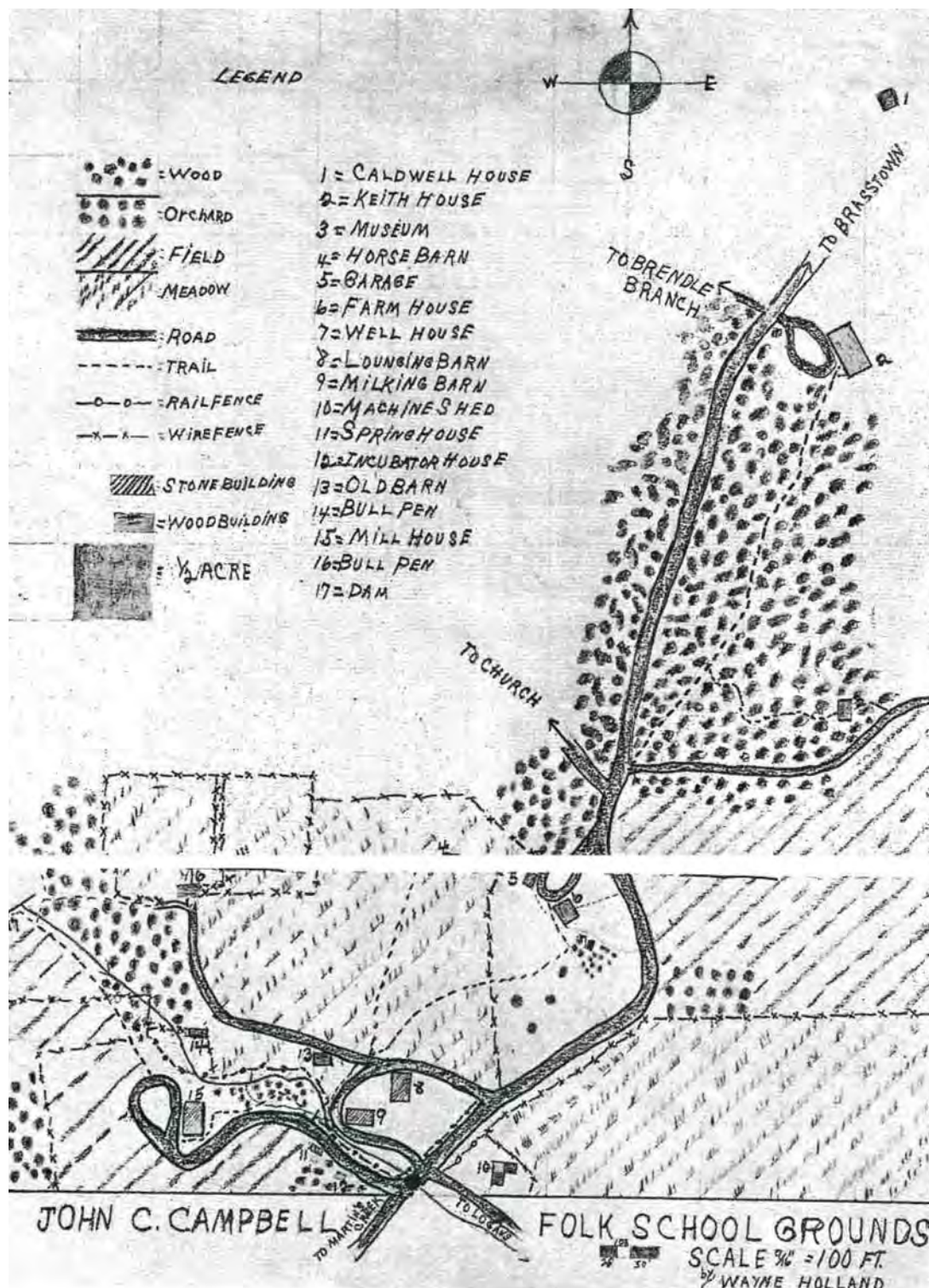
8. Fariello, *Craft and Community*, 23.



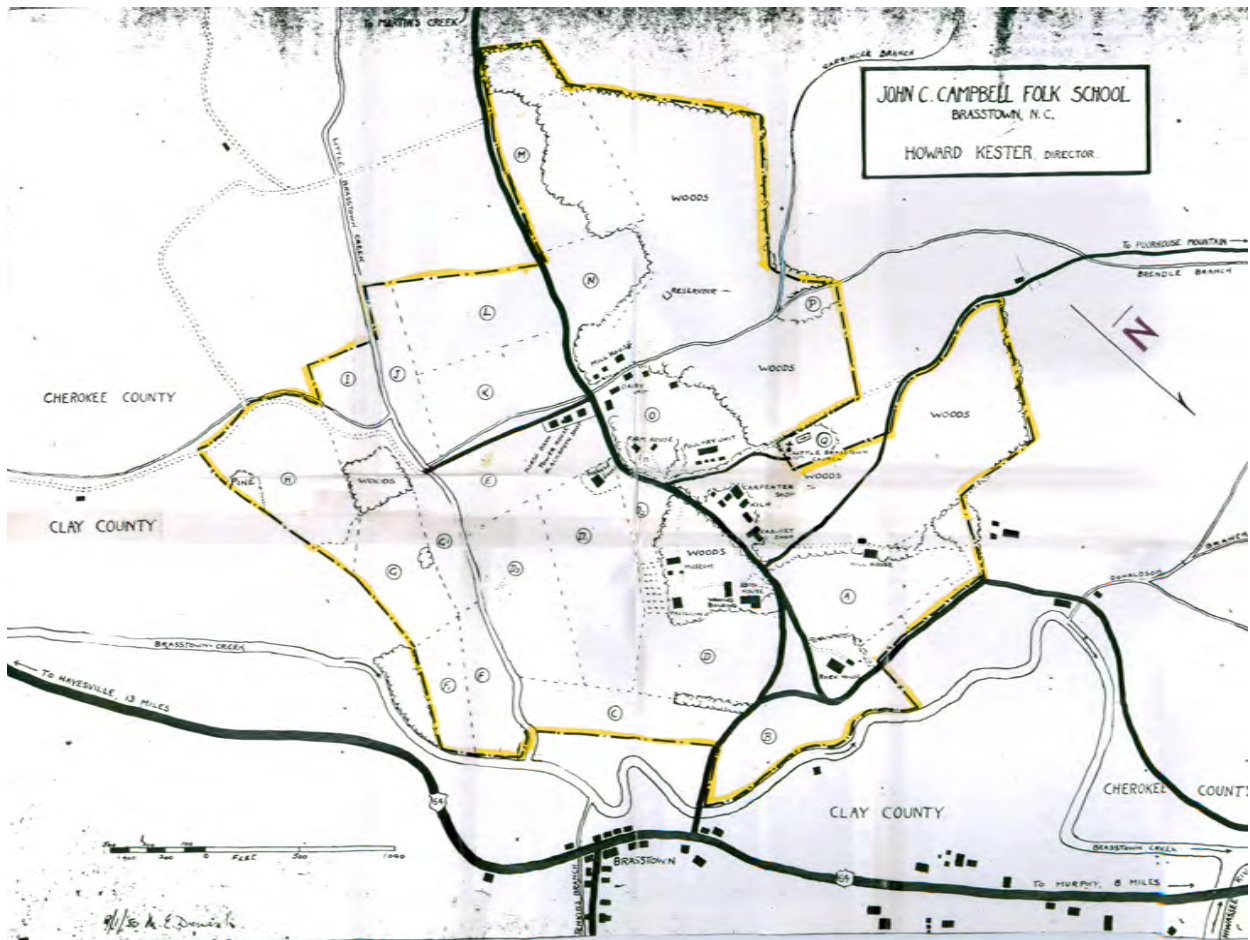
Brochure Cover circa 1942

to teach blacksmithing and to work on the farm. In 1932, crafts became an official part of the school curriculum and several new faculty joined the staff. Louise Pitman arrived around 1932 to teach dyeing and soon became Director of Handicrafts. Other classes offered during this period include weaving, quilting, basket making, and carving. The school also sought to preserve traditional lifeways, constructing a log museum in which to display cultural artifacts in 1926.

Working with the community was a central feature of the school. Campbell once commented that "Community and school are one."⁸ Whereas the typical students during the first years were mostly young people, the school developed multiple community initiatives to improve the economic



Map from April 1935 Newsletter



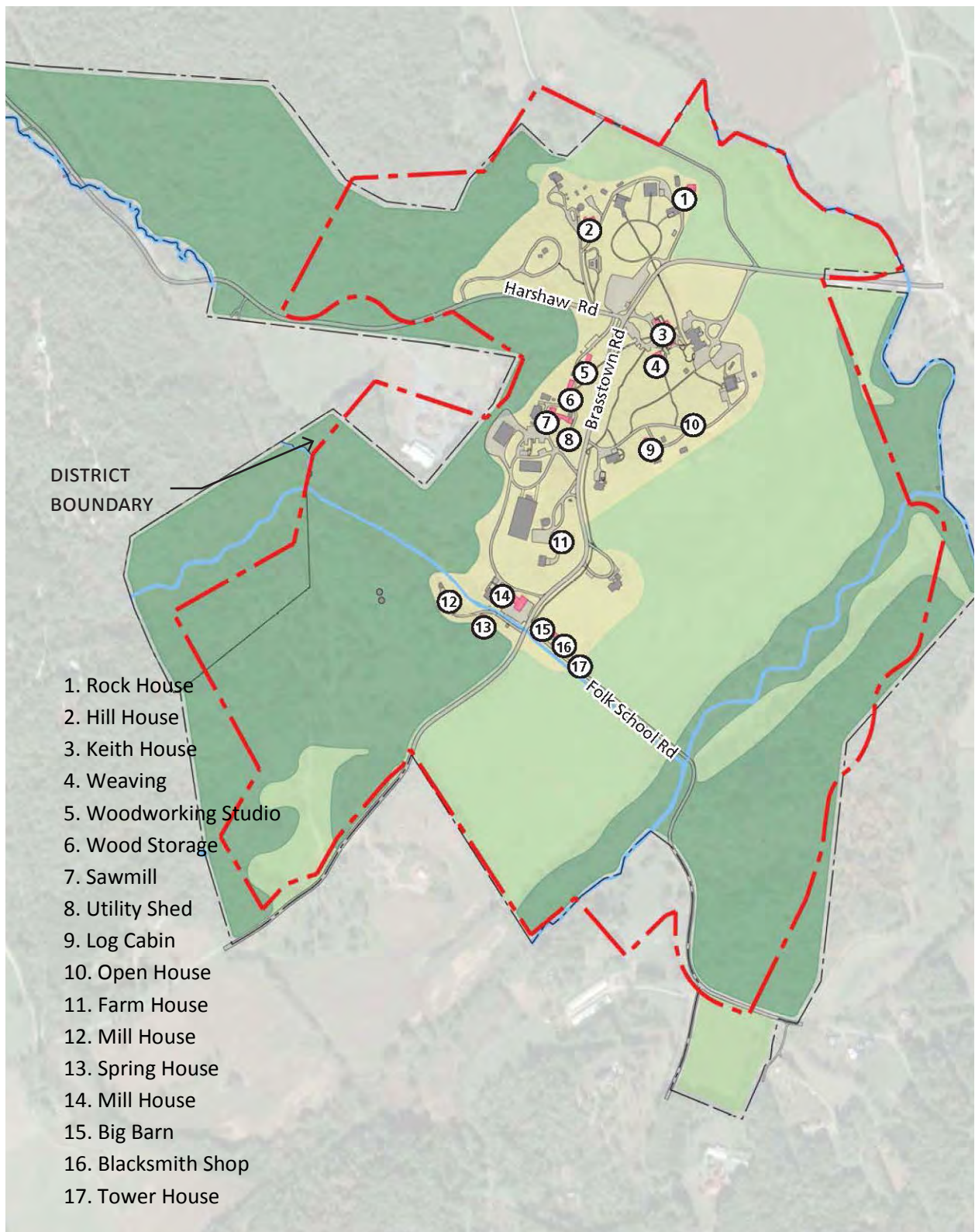
Map dated 1950 included in the National Register of Historic Places nomination

condition of families in Cherokee County. By the 1930s, the school had a demonstration farm, led by Georg Bidstrup, that taught local farmers progressive agricultural techniques. The farm raised a diversity of crops and featured large poultry and dairy operations. By the late 1930s, the farm expanded to include the Mountain Valley Cooperative, which marketed the products of local farmers. Income from the farm helped support the school and income from the Cooperative was distributed to local farmers. Similarly, the school organized the Handicraft Association, which also marketed the woodcarvings, quilts, and other locally made goods. By 1940, the revenue from craft sales was sufficient to pay the salaries of full time instructors.

Georg Bidstrup, the school's farm manager, became the director of the school in 1952 and continued the agriculture component of the school's original mission. In the early 1970s, the school began to transition away from agriculture and towards becoming a modern craft school. In 1973, Gus and Maggie Masters, former heads of the crafts department, assumed leadership of the school and redirected its educational focus. They terminated the farming operation, selling the school's dairy herd and converting agriculture buildings to craft studios. Subsequent directors initiated various campaigns to construct new studio and residential buildings on campus, resulting in the current assemblage of historic and more contemporary buildings.



Historic aerial of campus dated 1958



BUILDINGS LISTED AS CONTRIBUTING TO THE NATIONAL REGISTER HISTORIC DISTRICT

CAMPUS HISTORIC DISTRICT

The John C. Campbell Folk School was listed as a historic district in the National Register of Historic Places on August 22, 1983. The district boundary includes the entire campus at that time, listed as 366 acres on the nomination form. The nomination includes an inventory of 27 buildings on campus and designates 18 as contributing to the historic significance of the district. Two of the contributing buildings (two barns on south end of campus) are no longer standing. The current campus totals approximately 270 acres and the reason for the discrepancy is unknown. The historic district's period of significance is 1925-1974; and the property is significant in the areas of art, economics, conservation, education, architecture, social history, and agriculture. The statement of significance identifies three criteria for listing on the national register:

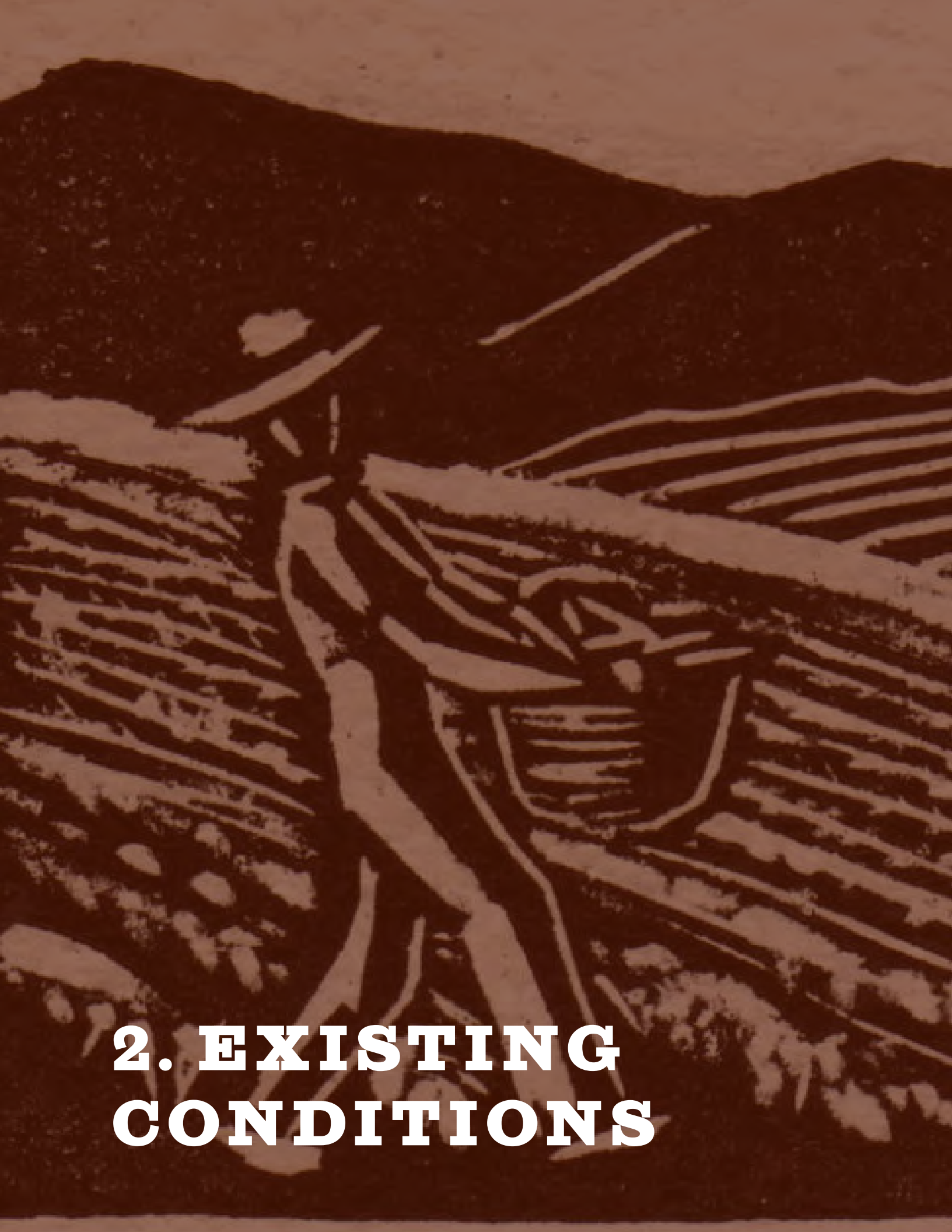
Because of the Folk School's association with the education and advancement of the people of the region, the National Register of Historic Places acknowledges its historic significance under Criteria A, which recognizes a property's association with events that have made a significant contribution to the broad patterns of history,

Because of the Folk School's association with the lives of Olive Dame Campbell and Marguerite Butler; the National Register of Historic Places acknowledges its historic significance under Criteria B, which recognizes a property's association with the lives of significant persons in our past;

Because of the unique architecture of the Folk School that reflects a cross-fertilization of American and European vernacular styles, the National Register of Historic Places acknowledges its historic significance under Criteria C, which recognizes properties that embody the distinctive characteristics of a type, period, or method of construction.



Mill House circa 1930



2. EXISTING CONDITIONS



CAMPUS BUILDING INVENTORY

EXISTING CONDITIONS

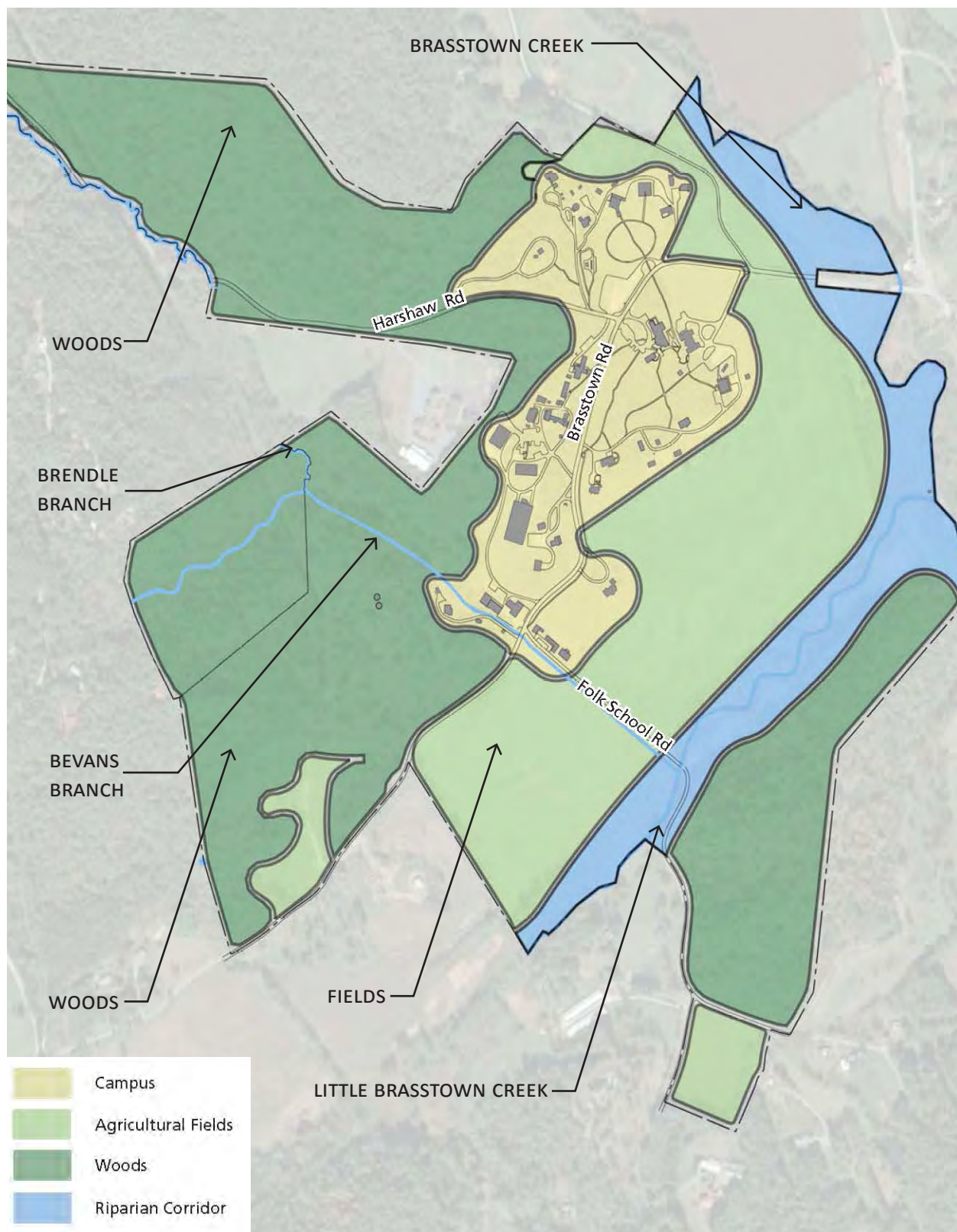
EXISTING CAMPUS

According to the Cherokee County Tax Assessors' records, the John C. Campbell Folk School campus encompasses 270.46 acres. This includes 261.56 contiguous acres that form the main campus. It includes a disconnected 8.9 acres located at 408 Waldroup Road (parcel number 55100332736800). The county shows the 261.56 acres of the main campus listed as two parcels. One parcel listed with an address of One Folk School Road (551003448726000) contains 254.16 acres; the second parcel (551001464909000) is a more recently acquired parcel measuring 7.4 acres located at 96 Martins Nest Lane. The John C. Campbell Folk School campus contains

distinct areas that reflect their land use and levels of development. A majority of the campus is undeveloped and features forested areas and open, agricultural fields. Of the 270 acres, approximately 145 acres are forested and 85 acres are open fields. The developed area features a combination of buildings and infrastructure related to the school's operation. The developed area covers approximately 40 acres.



Current aerial circa 2019



CAMPUS NATURAL SYSTEMS

CAMPUS NATURAL SYSTEMS

CAMPUS NATURAL SYSTEMS: TOPOGRAPHY, HYDROLOGY, AND SOILS

Topography: The entire campus of the John C. Campbell Folk School features rolling topography characteristic of the Blue Ridge physiographic region. The surrounding mountains are generally steep-sided, dissected by streams, and support dense, biologically-diverse plant communities. The campus boundaries contain forested ridges that slope down to streams and rivers. The high point on the campus is 1769 feet above sea level, at the top of the ridge on the southeastern edge of campus opposite Little Brasstown Creek. The school's water tanks are located approximately 1750 feet above sea level, near the peak of a ridge located southwest of campus. The low point on campus is approximately 1590 feet above sea level, along the banks of Brasstown Creek.

Hydrology: Four water bodies bisect or adjoin the campus. Brasstown Creek forms the eastern edge of campus. Brasstown Creek is a major water body in Cherokee County, draining a 58 square mile watershed before joining the Hiawasse River just north of the school's boundary. Little Brasstown Creek joins Brasstown Creek within the boundaries of campus. Bevins Branch drains two ridges southwest of campus before joining Brendle Branch. Brendle Branch flows southeast past the Blacksmith Shop and through campus within a straightened channel before joining Little Brasstown Creek. Smaller, intermittent streams drain the central area of campus. Two of these stream channels join and flow through the wooded area south of Keith House.

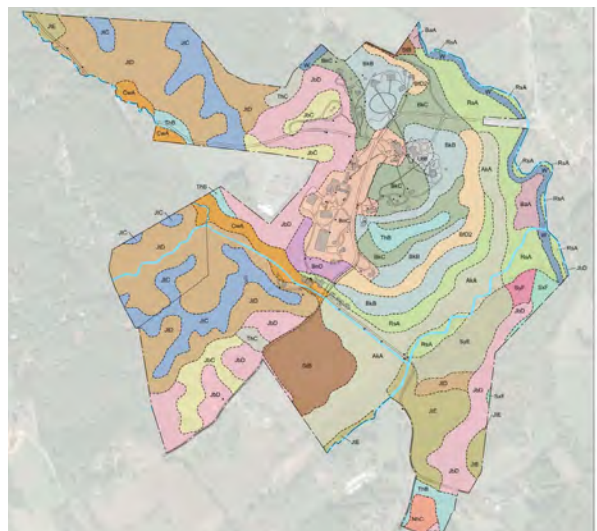
Soils: The three predominate soil types on the campus are Junaluska series, Braddock series, and Arkaqua series.

Various combinations of Junaluska complex soils make up the majority of the wooded areas on campus. These soils drain well with moderate permeability; but because they are usually found on steep slopes (15%-30%) they are susceptible to erosion if cleared. They are not suitable for septic tank absorption fields because of the slope and shallow depth to bedrock.

The second most common soil type on campus is different combinations of Braddock soils. These are very well drained soils with low erosion risk except in areas of steep slopes. They are suitable for building sites and septic field absorption fields.

Arkaqua loam makes up most of the lowlands of the pastures and open fields. This is typically suited for agriculture and building sites, but it is not typically suitable for septic fields because of its shallow depth to bedrock.

The natural systems—topography, hydrology, and soils—influenced the historical development and will influence future development of campus. The school located buildings and roads in relatively flat areas of campus that are out of the flood zone of local rivers. Soils suitable for septic also limit where buildings were developed.



Existing Soils Map



CAMPUS ZONES

BUILT ENVIRONMENT

CAMPUS ZONES:

The developed areas of campus are along either side of Brasstown Road. There are four zones within campus with relatively distinct character. The development of these four zones reflects the historical evolution of the campus and its historic road network. Newer buildings on campus are often clustered near existing historic buildings or on the edge of woods. The four campus zones include:

- North Campus
- Campus Core
- Studio Row
- South Campus

North Campus includes the area north of Brasstown Road, roughly between Scroggs Road and Harshaw Road. It includes two internal roads: Rock House Road and Martins Nest Lane. It includes the campground, three educational studio buildings, and five residential buildings. The three studios and the Moulton memorial garden face an open area with an oval walking path. It also includes the main campus parking lot located at the corner of Harshaw Road and Brasstown Road. Two buildings in North Campus, Hill House and Rock House are listed as contributing resources in the National Register nomination.

Campus Core includes the cluster of buildings southeast of Brasstown Road, roughly bound by Davidson Lane's two intersections with Brasstown Road. This includes the building cluster near Keith House and several buildings lining Davidson Lane. Several of the buildings feature a combination of

administrative and educational uses. There are also three residential buildings. Four buildings in Campus Core, including Keith House, History Center, Open House, and Log Cabin (Museum), are listed as contributing resources in the National Register nomination. The area also includes the Folk School garden and a large wooded area and ravine between the garden and Keith House.

Studio Row includes the area west of Brasstown Road, south of its intersection with Harshaw Road. The area includes sixteen buildings, most of which serve some educational function, including studios, special event spaces, or material storage buildings. There are also three residential structures and one maintenance facility building. Five buildings in Studio Row, including Woodworking Studio, Wood Storage Shed, Woodcarving Studio and Saw Mill, and Farm House, are listed as contributing resources in the National Register nomination.

South Campus includes the cluster of buildings on the south end of the developed area of campus. It extends north to include the Orchard House, but most of the buildings are grouped together near the intersection of Brasstown Road and Folk School Road. The buildings include educational studios, the resident blacksmith's studio, administrative offices, storage, and residential buildings. This is also the site of the wells that supply water to the rest of campus. Six buildings in South Campus, including Big Barn, Tower House, Cantrell Blacksmith Shop, Whitaker Blacksmith Shop, Spring House, and Mill House, are listed as contributing resources in the National Register nomination.



CAMPUS CIRCULATION

	National Register Properties		Major Vehicular Routes
	Non NR Properties		Minor Vehicular Routes
	Pedestrian Routes		Primary Vehicular Routes
	Primary Pedestrian Routes		Gateway
	Pedestrian Crosswalks		

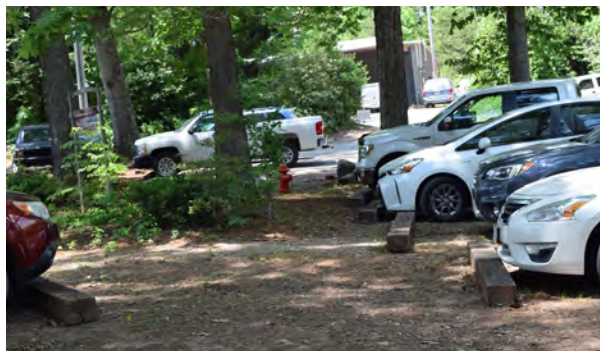
CAMPUS CIRCULATION

VEHICULAR CIRCULATION

Vehicles are omnipresent on campus. Students and staff use their own vehicles to travel between areas of campus throughout the day. Parking areas exist throughout campus. Brasstown Road bisects campus and presents a safety issue with vehicular/pedestrian conflicts at multiple locations. (See more information on crosswalks below in the following section on Pedestrian Circulation.)

Campus Gateways

There are two gateways into campus, at both threshold points on Brasstown Road where vehicular traffic enters a space clearly recognizable as part of the campus. The primary gateway into campus is at the western terminus of the bridge across Brasstown Creek on Brasstown Road. From this vantage point, a visitor looks across the lower fields to a cluster of buildings including the Olive Dame Campbell Dining Hall and Davidson Hall. A secondary gateway exists at the intersection of Brasstown Road and Folk School Road where a cluster of architecturally distinct buildings establish a visual threshold onto campus. A third potential gateway exists along Harshaw Road, but the entrance into campus is not as legible as at the other locations.



External Roads and Drives

Four public roads cross campus. The main road through campus is Brasstown Road (NC 1564). It intersects Old Highway 64W on the east side of Brasstown Creek just outside of the campus boundary. It travels west into campus, turning south near the middle of campus, and exiting the campus on its most southern boundary. According to NCDOT records, the Annual Average Daily Traffic (AADT) count for the section through campus was 1,700 in 2015. Near the middle of campus, Harshaw Road (NC 1558) intersects Brasstown Road and travels west and north towards Murphy, North Carolina. The AADT for Harshaw Road was 240 in 2015. Near the south end of campus, Folk School Road intersects Brasstown Road and heads east, crossing Little Brasstown Creek. The AADT for Folk School Road was 300 in 2016. Scroggs Road, which is gravel, bisects a narrow section of the campus along its most northern boundary. The other public roads described above are asphalt.

Internal Roads and Drives

There are several internal roads and driveways on campus. People on campus use these roads to access buildings and to traverse campus during the day. Most of the internal roads and drives are gravel and measure between ten and twenty feet in width. The only paved internal drives are the loop driveway at Keith House and the section of Davidson Lane between Brasstown Road and Olive Dame Campbell Dining Hall. Internal roads include Rockhouse Road, Martins Nest Lane and the campground access drive in North Campus; Davidson Lane, Keith House drive, in Core Campus; Plateau Lane, Farm House Road, and an unnamed service drive between the Festival Barn and the Blacksmith Shop in Studio Row; the driveway to Orchard House and the driveway to Mill House.



Parking

There are developed parking lots and informal parking areas located throughout campus. The largest and primary parking lot is at the intersection of Harshaw Road and Brasstown Road. Other large lots exist between Olive Dame Campbell Dining Hall and Davidson Hall; between Louise Pitman Fiber Arts Building and Studio Row; and near the Blacksmith Shop on the south end of campus. There are parking spaces next to nearly all buildings. In some locations, most prominently in Studio Row, additional informal parking areas occupy spaces between trees and extend into areas adjacent to buildings. A recent project to improve accessibility resulted in the construction of concrete parking pads at most campus building.

Main campus parking lots, with comment on their condition, include:

- Main Lot (Harshaw Road and Brasstown Road). This is among the most important lots on campus because of its centralized location and proximity to Keith House. It has room for approximately forty-five spaces, however, its irregular shape results in an inefficient use of available space. The lot is sloped from south to north, which results in erosion of its gravel surface during storm events. (Erosion is discussed in further depth below in the following Storm Water Drainage section);
- Two large parking areas in the space between Davidson Hall and Olive Dame

Campbell Dining Hall. The parking area adjacent to Olive Dame Campbell Dining Hall, which also serves the Craft Shop, is asphalt. It features twelve parking spaces. The parking area closer to Davidson Hall is gravel. It features twenty-four parking spaces;








- Studio Row Parking Lot (between Enameling/Clay Studio and Louise Pitman Fiber Arts building). This gravel lot is in two sections. The upper level is roughly rectangular with spaces along its south and north edges. It has approximately ten parking spaces. There is a lower section with parking spaces developed in spaces between oak trees. The parking spaces in this lot are all sloped, which leads to storm water runoff into Studio Row and onto Brasstown Road;
- There is a small paved parking area at the Blacksmith Shop with room for twenty parking spaces;

- There is a small paved parking area at the Keith House that is a major campus access point with room for approximately twelve parking spaces;
- There are smaller gravel parking areas distributed across campus that serve multiple buildings. These include parking areas adjacent to Woodturning Studio (six spaces), Book and Paper Arts Studio (seven spaces), Rock House (five spaces), Woodworking Studio (six spaces), Farm House and Little House (fifteen spaces), and Tower House (five spaces).
- Cars often park in non-designated parking areas along the sides of roads and drives. Examples include north of Woodcarving Studio and north of Woodworking Studio.
- Concrete pads for accessible parking exist at most buildings on campus.





CIRCULATION AND MATERIALS

	Existing Structures		Concrete
	Gravel		Stone
	Mulch		Asphalt
	Wood		

PEDESTRIAN CIRCULATION

A variety of pedestrian walkways and paths exist on campus. Most of the pedestrian system consists of paths surfaced with mulch or gravel. These unimproved pathways generally connect different buildings or connect different areas of campus. Existing hardscape walkways are mostly paved with concrete but there are also boardwalks and stone-paved paths. Several paths and walkways converge in the vicinity around Keith House and Olive Dame Campbell Dining Hall. This area serves as the primary pedestrian circulation node on campus, where staff and students converge multiple times every day. Other significant pedestrian circulation routes include the path from Keith House to the North Campus, the paths through the woods between Keith House and Studio Row, and the path along Brasstown Road to South Campus. Pedestrians also use interior roads for circulation. This includes Davidson Road and Plateau Lane.

There are multiple woodland trails on campus. A trail through the woods near Martins Nest Lane provides access to Moulton Garden, Hill House, Hubbel House, and The Cottage. The Rivercane Walkway consists of several trails that follows Little Brasstown Creek along the eastern property boundary. These include the Blackberry Loop Trail, Northside Trail and Southside Trail. Spur trails connect the center of campus to this trail system. The Mill House trail leads into the woods west of the Blacksmith Studio and connects to the White Oak Trail on the ridge overlooking campus. In total, the trails measure approximately 2.87 miles in length.

Representative examples of hardscape walkways include:

- Stone and concrete walkways and patio areas near Keith House and History Center

Representative examples of non-hardscape pedestrian paths include:

- Mulched paths through woods between Keith House and Studio Row
- Mulched path between Olive Dame Campbell Dining Hall and North Campus
- Gravel path between Woodworking Studio and Wood Drying and Storage Shed
- Gravel path within Studio Row
- Mulched walkway along Brasstown Road between Campus Core and South Campus



Accessibility Condition Assessment

Because of the topography, many of the paths incorporate steps and stairs to negotiate steep slopes. Additionally, several of the buildings have ramps and stairs to provide access to finished floor elevations.

A quick analysis of grades on walkways shows that many of the walkways are steep and exceed The Americans with Disabilities Act (ADA) guidelines. ADA compliant walkways are less than 5%. ADA compliant ramps are less than 8.33%. Most of the walkways and ramps between Keith House and Olive Dame Dining Hall, for example, exceed 11% (most measured between 11% and 16%). The path between Davidson Hall and Olive Dame Dining Hall measured 20%. ADA standards require walking surfaces to be firm, stable, and slip resistant. The gravel and mulch surfaces of the unpaved paths provide an unstable walking surface susceptible to erosion and wash.



Representative examples of accessibility ramps:

- Concrete ramp between Keith House and Olive Dame Campbell Dining Hall
- Wood ramp leading down to entrance into Woodcarving Studio
- Wood ramp leading up to side entrance of Farm House

PEDESTRIAN-VEHICULAR CONFLICTS

Five designated pedestrian crossing points exist along Brasstown Road. Potential strategies for improving safety are provided in the recommendations section. Many of the recommendations would require Cherokee County and North Carolina Department of Transportation (NCDOT) approval before implementation.



Speed Limit and Sight Distances

Brasstown Road has posted speed limit signs of 25 mph within the campus boundaries. One parameter for evaluating safety at these crossings is adequate sight distance between pedestrians and vehicles to provide sufficient time for the pedestrian to decide to cross and then safely travel the distance across the roadway. A rough approximation for this minimum distance (at 25 mph assuming a 24-foot roadway width) is:

Elderly Pedestrian (assume 3 feet per second walking speed) = 370 feet minimum

Mobility Impaired (assume 2.5 fps) = 470 feet minimum

The results below assume that mobility impaired persons will not be using these crosswalks and instead will use on-site ADA accessible parking spaces provided at or near each building. Also, the minimum 370 foot distance should be provided at all mid-block crosswalks regardless of additional safety measures employed. Rough estimates of sight distance at each crossing were measured using a hand-held rangefinder. Actual sight distance should be measured with survey equipment prior to implementation of improvements.

Crosswalk A

This crosswalk provides connectivity across Brasstown Road between North Campus and Campus Core. Instructors and guests use this connection several times a day to travel between living quarters and studios on North Campus to

the Keith House and Olive Dame Campbell Dining Hall. Sight distance was measured from the inside (south side) of the road curve, which is the side where visibility is most restricted.

Sight Distance looking southwest is severely limited by road grade and curve and appears to be approximately 150 feet.

Sight Distance looking east appears to be around 300 feet but could easily be increased to acceptable distance by relocating a portion of the fence out of the view corridor.

This crossing is likely the most dangerous of all of the crossings on campus due to severely restricted sight distance to the southwest. It is unlikely that adequate sight distance can be provided here without major re-work of the roadway.



Crosswalk B

Located near the intersection of Harshaw Road and Brasstown Road, this crosswalk connects the main parking area to the Keith House and Olive Dame Dining Hall. Because this connects to the main parking lot on campus, it is likely the initial arrival point for new guests and visitors. Two accessible parking spaces are provided in the parking area, which may encourage mobility-impaired guests to use this crosswalk. (Note that the provided spaces do not meet accessibility requirements --incorrect striping, slope issues, sign issues). Sight distance was measured on the east (most restrictive) side of the road.

Sight Distance looking south is roughly 300 feet and is partially blocked by signs, tree, landscaping, and fence. Relocation and/or removal of these items may achieve the minimum sight distance needed.

Sight Distance looking north appears to be around 300 feet. Needed sight distance may be achieved by lowering the roadway embankment between the ditch and fence.

Crosswalk C

This crosswalk connects the Woodworking Studio and other studios in Studio Row with the Keith House and Olive Dame Dining Hall. Sight distance was measured on the east (most restrictive) side of the roadway. Sight distance looking north is roughly 150 feet and restricted by vegetation and road curvature. Sight distance looking south is approximately 300 feet.

Crosswalk D

Crosswalk D crosses Brasstown Road near its intersection with Davidson Lane. This crosswalk connects Studio Row to the area south of Brasstown Road near Field House, the road to the farm, and paths towards Keith House. Sight distance was measured from the most restrictive (east side) of the roadway. Sight Distance looking south is roughly 300 feet and can likely meet the recommended minimum by removal / relocation of some small trees. Sight Distance looking north is in excess of 600 feet and is adequate.

Crosswalk E

Crosswalk E sight distance appears to be adequate in both directions.

STORMWATER AND EROSION

Existing Conditions

WLA Studio visited campus during several rain events, including a relatively significant storm on April 19, 2019. According to the Weather Underground website, a weather station in Murphy, NC recorded 3.61 inches of rainfall, with almost two inches recorded between 5 am and 11 am. There was significant accumulation of storm water on campus. Several buildings had water ponding against their foundations and at least two buildings (Rock House and Hill House) experienced flooding in the basements. Water overflowed drainage swales and flowed across adjacent roads and driveways. The creeks overflowed their banks flooding adjacent fields and woods.

Existing condition inventory reveal that there are 22 individual drainage basins on campus, where topographic conditions concentrate the flow of stormwater to a specific point. All the stormwater not infiltrated into the soil eventually drain into the creeks and rivers along the boundary of the campus. The hydrologic soil groups (HSGs) represented on-site consist of group A, B, and C soils. The majority of the developed area of campus is HSG A and B, both of which can infiltrate water well. Currently, most of the stormwater is managed by swales and culverts. Stormwater flow into swales, which convey the water downhill. Culverts allow the water to pass under roads and walkways. Many of the culverts are corrugated plastic pipe. Based on peak runoff calculations, the existing pipes and culverts are designed to handle a two-year storm event. Additionally, the flood plain for Brasstown Creek and Little Brasstown Creek extend into the campus along its southern and eastern boundary.

North Campus Problem Areas

- Painting Studio has water ponding on south, west, and north elevations because lack of positive drainage away from building and inadequate drain structures to convey water away from building;
- Woodturning Studio has water ponding along south and west elevations because of poor grading and a collapsed drain pipe;
- Storm water flows down Martins Nest Lane, flows along the north edge of Harshaw Road, turns down the entrance drive into the large gravel parking lot. This water concentrates as it flows across the gravel parking lot resulting in erosion of the lot and exit drive.

Campus Core Problem Areas

- The History Center has water ponding next to its foundation because of lack of positive drainage;
- Davidson Hall and Olive Dame Campbell Dining Hall have historically experienced water infiltrating their lower levels. Water was seen ponding at the southeast corner of Davidson Hall because of poor grading and an undersized drainpipe that may be crushed under the adjacent gravel road;
- The drainage ditches in the woods south of Keith House feed a corrugated pipe that travels under the pavilion and outlets into

an undersized rain garden at the edge of the parking lot adjacent to Olive Dame Campbell Dining Hall. This rain garden is incapable of storing a significant rain event, leading to water overflowing into the parking lot;

- The open field below Olive Dame Campbell Dining Hall experiences prolonged periods of saturated soil because of ponding and poor drainage.

Studio Row Problem Areas

- Ceramics and Enameling Studio has ponding on the west (rear) elevation because of inoperable drain pipe and poor grading;



- Woodcarving Studio has water flowing from the road, down the ramp, and onto porch;
- The area along the north elevation of the Woodcarving Studio collects water because of lack of positive drainage away from building. Cars parking along the edge of the road exacerbate the issue by compacting the soil and rutting the ground when wet;
- There are drainage ditches cut into the hillside in the wooded area west of the Woodworking Studio. These ditches collect surface flow and convey the water to the drainage ditch along the west side of the drive to the Woodworking Studio. This water travels through a corrugated plastic pipe under the driveway and outlets into the open area north of the Woodworking Studio;
- Additional water from the woods west of the Woodworking Studio also flows from the area adjacent to the open-sided pavilion, crosses the drive near the northwest corner of the studio, and collects in the greenspace north of the studio;

- Significant amounts of water converge at a drainage structure north of the Woodworking Studio, near the crosswalk across Brasstown Road. This drainage structure is fed by three corrugated plastic drainpipes. Water is then conveyed via a metal drain pipe under Brasstown Road into drainage ditches crossing the woods south of Keith House;
- Surface water from the parking lot at the Louise Pitman Fiber Arts Building flows across the lawn south of Sawmill. There are collapsed corrugated pipes previously installed to convey this water under the gravel surface of the road east of the Sawmill. The surface flow results in erosion of the gravel roads and wet soil conditions;



- Storm water from the parking lots near the Louise Pitman Fiber Arts Building flows down the gravel drive and onto Brasstown Road. An existing drain inlet in the road is ineffective because of existing grading. The water concentrates as it passes the drain, eroding the gravel. This water travels down Brasstown Road, contributing to the water flow problems in South Campus, specifically at the intersection of Folk School Road and Brasstown Road.

South Campus Problem Areas

- Water collects in the paved area southeast of the Big Barn;
- Storm water from uphill on campus flows onto Brasstown Road and travels along the east edge of the road, crosses to the west side of the road near the drive to Orchard House, and crosses back again to the east side of the road near the intersection of Brasstown Road and Folk School Road. The concentrated flow of water causes significant erosion at the corner and standing water issues along the north side of Folk School Road;
- There are collapsed plastic drain pipes intended to convey water under the driveway to the Tower House.



Keith House, nerve center of the John C. Campbell Folk School

Keith House from 1954 newsletter

CAMPUS BUILDINGS

BUILDINGS AND STRUCTURES

Buildings on the John C. Campbell Folk School campus are classified by use and include administrative/institutional buildings, residential housing, and educational studios. Some buildings combine residential with administrative or educational use. These include Keith House, Davidson Hall, Orchard House, and The Cottage.

The following description organizes campus based on predominate use and location.

NORTH CAMPUS

North Campus contains three studio buildings, five residential buildings, the campground bathroom, and multiple ancillary buildings including storage shelters and pavilions. This area also contains several recently constructed buildings, including the three educational studios: Book and Paper Arts Studio, Painting Studio, and Willard Baxter Woodturning Studio.

Residential Buildings

Rock House: Listed in the National Register, the Rock House is a stone and wood building used for student housing. The building predates 1937, the date when the JCCFS purchased the property and remodeled the building. Leon Deschamps was involved in the remodeling and presumably is responsible for the existing stone cladding, which is seen on other Deschamps buildings on campus. The building was remodeled in the 1990s. The building is in good condition, though the basement floods during storm events.

Little Rock House: Adjacent to the Rock House, the Little Rock House was originally a garage. It was enlarged and renovated in 1988 for housing. It is in poor condition with visible signs of rotten wood and a failing roof system.

Hill House: Also listed in the National Register, Hill House was designed and constructed by Leon Deschamps in the late 1930s and features Deschamps' signature fieldstone facing. The gabled-roof building features ornamental iron work by Oscar Cantrell and carved-wood ornamentation by Deschamps. The house was renovated in 2011 and is used for housing. The building is in good condition, though the basement floods during rain events.

Hubbell House: Adjacent to Hill House, the Hubbell house was built by the Hubbell family in 1972. A few years later, the family donated the building to the school. It was renovated in 2007. It is used for housing and is in good condition, though its architecture does not fit into the overall aesthetic of the campus.

The Cottage: Acquired by the Folk School in 2011, the Williams family constructed the building in the 1960s. It is used for housing, but offers a secluded meeting space for special functions and administrative meetings.

Educational Studio Buildings

Book and Paper Arts Studio: The most recently constructed building on campus as of 2019, the Book and Paper Arts Studio has three studio spaces on the lower level and archival storage on the upper level. It was noted during conversations with staff that the building would benefit from an outside “wet studio” workspace.

Painting Studio: The Painting Studio was constructed circa 2005. The side gabled building has porches on the front and back elevations. Noelle’s Garden, a memory garden dedicated to a wife of a former student, is located at the front (south) entrance into the building. The building has a deficiency of storage space for large art-related equipment and lacks adequate ventilation for paint and finishing fumes.

Willard Baxter Woodturning Studio: This studio was constructed in 2006 and includes multiple work spaces and a gallery space. The building is well equipped, well organized, and appears to accommodate current demand.

Administrative/Institutional Buildings

Campground Bathhouse: The CMU-constructed bathhouse dates from circa 1990s. It is a utilitarian structure with little architectural character. The campground was added to campus in the 1970s.

Moulton Gardens: The garden is on an elevated terrace overlooking the open space at the center of North Campus. A shade structure is missing its roofing, but the stone walls and stone patio are in good condition. A CMU wall, supporting the terrace, has failed in sections.



View of North Campus



View from North Campus towards Brasstown Creek

CAMPUS CORE

Campus core contains a total of nine primary structures and several ancillary buildings including garden structures and pavilions. Two buildings are residential (Field House and Bidstrup House). Davidson Hall has housing on its upper level and educational studios on its two lower levels. Keith House, History Center, and Olive Dame Campbell Hall are primarily administrative buildings but also serve other institutional functions.

Administrative/Institutional Buildings

Keith House: Keith House was built between 1926 and 1929 and is listed in the National Register as a key building contributing to the historic significance of the campus. Dorothy Bacon, Olive Campbell's niece, designed the building. The first portion of the building constructed includes the Community

Room, which is used for meetings and special events. Under the direction of Leon Deschamps, the school enlarged the original structure to approximate its current configuration by 1929. Later additions include a recent restroom addition and a glass greenhouse attached to the basement level. The building has four stories and a complex roof of intersecting gables and projecting shed dormers. The basement was originally the school's kitchen and dining hall and is currently the location of various educational activities and community events. The main floor contains the central administrative offices for the school in addition to other meeting and special event rooms, including the Community Room. The second and third floors feature both office spaces and residential rooms.



Keith House

History Center: Constructed in 1939 by Leon Deschamps and listed in the National Register, the History Center originally housed the campus laundry and weaving studio. The two-story building has also been the location of the Craft Shop, a woodcarving studio, office space, and archival storage. It became the History Center in 2000. The main level was renovated in 2018.

Olive Dame Campbell Dining Hall and Craft Shop: Constructed in 1992, the upper level of the building contains the campus dining hall and kitchen. The lower level contains the Craft Shop.

Davidson Hall: Davidson Hall is a multi-use building constructed in 1999. The two lower levels feature educational studios (cooking, dyeing/spinning/felting, and music); and the third floor has student housing.

Open House: Open House was constructed between 1939 and 1947. It is an open-sided pavilion with a low-pitched pyramidal roof. It is currently the location of community events and school group educational activities. It is listed in the National Register and is in fair condition.

Log Cabin Museum: Community volunteers constructed the Log Cabin Museum in 1926. It includes two donated cabins moved onto campus and reconstructed on site. The two cabins have half-dovetailed corner timbering; a single roof connects the buildings creating a “dog trot” passage through the center of the structure. The Caldwell family originally constructed the larger cabin in Cherokee County in 1897. The smaller cabin, named Brendle Cabin, may predate the Civil War and was originally located in Clay County. One of the cabins became housing for staff during the early years of the school, but the purpose for



Davidson Hall

reconstructing the cabins on campus was to create a museum dedicated to preserving tools, crafts, and lifeways of Appalachian culture. The building was renovated in 1973 and is being repaired as of 2019. The building is listed in the National Register.

Log Barn: A second log building sits across the road from the Log Cabin Museum. This structure is a double-pen log crib structure with V-notch corner timbering. This structure, constructed in 1970, replaced another log structure formerly at this site. It is currently used as storage for the gardening program.

Residential Buildings

Bidstrup House: The Bidstrup House is currently used for housing work-study students. It was constructed in 1982 as student housing.

Field House: Field House was constructed for student housing in 2008.



Log Barn (foreground) and Log Cabin



Rear door of Keith House



Open House



View to the west from campus towards mountains

STUDIO ROW

Studio Row contains sixteen buildings, most of which serve educational or administrative/institutional function, either as studio space, for special events, facilities maintenance and housekeeping, or for storage. There are also three residential buildings. There are several smaller buildings, including two open-sided pavilions and the Outdoor Kiln Shed.

Educational Studio Buildings

Woodworking Studio and Rock Room: The Woodworking Studio was constructed first in the 1930s and reconstructed in 1945 after a fire in 1944. The Rock Room, an ell-shaped addition to the original building, was constructed in 1997 as a painting studio but now serves as the basket/brooms/chair seat studio. The building is listed in the National Register.

Wood Drying and Storage Shed: Also listed in the National Register, the Wood Drying and Storage

Shed was constructed in 1932 to support the functions of the nearby sawmill.

Woodcarving Studio and Sawmill: The Woodcarving Studio and Sawmill consists of two frame buildings attached by an open-sided shed. The complex was constructed in 1932 and the entire building is listed in the National Register. The shed shelters a nonfunctional sawmill. A small frame building attached to the east end of the sawmill shed is used for storage. The roof of the main building (Woodcarving Studio) was modified after the 1980s with the addition of an elongated shed-roofed front porch. The siding also appears to have been replaced. While the two frame buildings appear to be in good condition, the sawmill structure is in poor condition, with multiple instances of repairs using non-historic lumber and concrete pier supports.

Jewelry Studio: Uphill from the Woodcarving Studio, the Jewelry Studio was constructed from locally harvested pine in 1970 as the pottery studio. It was enlarged in 2011.



Woodcarving Studio and Sawmill

Enameling and Clay Studio: This gable-end building houses both the pottery studio and the enameling studio. Cherokee County originally constructed the building to be a cooperative cannery. It is a CMU block building later sheathed with wood panels. The county donated the building to the Folk School in 1969.

Louise Pitman Fiber Arts Building: The Louise Pitman Fiber Arts Studio was constructed in 1983 on the slab of a previous poultry house that dated to the 1920s. The studio has two large rooms used for fiber art-related classes.

Outdoor Kiln Shed: The shed was first constructed around 1990. It was renovated during a timber framing class in the early 2000s.

Administrative/Institutional Buildings

Utility Building: A small stone utility building is south of the sawmill. Listed in the National Register as constructed in 1932, it exhibits similar construction details as other buildings on campus constructed by Leon Deschamps. While its original use is unknown, it is currently used for storage.

Little Jewelry: Next to the Jewelry Studio, the Little Jewelry building appears to be contemporary with the older, 1930s-era buildings in the area, but it is not mentioned in the National Register nomination. Its original use is unknown, though it has the appearance of a hen house or other farm structure. It is in poor condition and currently used for storage.

Festival Barn: Built as a dairy barn between 1967 and 1971, the Festival Barn now serves as a special event space and classroom. It has a large central unit under an open gabled roof system with two flanking wings covered by shed roofs.

Maintenance and Housekeeping Building: This building was constructed in 2004. The steel butler building with metal cladding serves as a maintenance shop, office, and laundry facility.

Residential Buildings

Farm House: Listed in the National Register as a key structure on campus, the Farm House was constructed prior to 1925. It predates the formation of the school and existed on the original acreage donated by the Scroggs family to start the school. Olive Campbell lived in the house and taught classes in the building during the early years of the school. It is a small, side-gable frame structure with a wide porch extending across the front elevation. It was added onto over time, with a dormer addition and rear ell added sometime in the late 1920s. The building was renovated circa 2002, when a back spiral staircase was removed, a new staircase added, and the sleeping porch was enclosed.

Little House: Built in 1981, the Little House is used for housing. It was constructed as a homesteading demonstration project on harnessing solar power.

Log House: Built in 1988 by a log framing class, the Log House is used for housing.

SOUTH CAMPUS

There are a total of nine buildings on South Campus. The buildings include educational studios, an active blacksmith studio, administrative/institutional buildings, storage, and residential buildings.

Educational Studio Buildings

Francis Whitaker Blacksmith Shop: Originally constructed as a milking barn in 1930 by Bidstrup and Deschamps, the Francis Whitaker Blacksmith Shop was temporarily used as a dormitory before becoming the permanent location of the blacksmith studio. The Francis Whitaker Blacksmith Shop is a long, half-timbered building in fair condition. The walls have been recently shored-up with structural supports.

Clay Spencer Blacksmith Shop: This blacksmith studio opened in 2010. This timber-constructed

building incorporates two historic silos to create a multi-level blacksmith shop with meeting space.

Administrative/Institutional Buildings

Tower House: Listed in the National Register, the Tower House was constructed in 1933 by Leon Deschamps. The building originally served as a blacksmith shop with living quarters on the upper story. The main building has rock veneer typical of a Deschamps building. There are shed roof storage buildings extending off the side of the building. It is currently used for as office and storage space.

Oscar Cantrell Blacksmith Shop: Built in 1946 as a blacksmith shop, the building exhibits the construction techniques seen in other Deschamps buildings on campus though not attributed to Deschamps. It is currently used as the studio for the Folk School's resident blacksmith.



Big Barn

Big Barn: Historically part of the Folk School farm operation, the Big Barn was constructed in 1931 by Leon Deschamps and Georg Bidstrup. The lower level of the main portion of the barn exhibits Deschamps signature stone veneer construction. The building was added onto with an ell projection connected to its western elevation. It is listed in the National Register.

Red Barn: Constructed in 1982, the Red Barn occupies the site of a previous building constructed in the 1930s that was included as contributing to the National Register historic district. It was previously used for storage but has been abandoned because of its poor condition.

Spring House: Constructed in 1928 and listed in the National Register, the spring house was originally built as a storage building for perishable dairy products. It was converted to a restroom and shower facility but is currently not used.

Residential Buildings

Orchard House: Originally constructed by the Brownlee family between 1952 and 1954, the Brownlee family donated the brick building to the school. It is used for student housing and a wing of the building is used as a writing and photography studio.

Mill House: Designed and constructed by Leon Deschamps and Georg Bidstrup between 1928 and 1930, the Mill House was the original location of the woodworking shop. The building's lower level is covered with stone veneer similar to other contemporary buildings of campus, and its second floor features decorative half-timbering. A mill wheel attached to the side of the building once powered woodworking equipment and the campus water system's pump. The upper level was used as a dormitory space. It is now used as housing.



Mill House

SMALL-SCALE FEATURES

SMALL SCALE FEATURES AND SITE FURNISHINGS

Site furnishings are important features that help define the public space on campus. They contribute to the overall visual character of the campus and contribute to a visitor's comfort and experience. The campus has examples of wonderful, hand-made site furnishings—many are the products of the blacksmith program. These hand-crafted furnishings are most reflective of the artisan tradition of the school. There is an opportunity to expand the practice of creating custom features for campus. For the furnishings not made by local craftsman, there is a general lack of consistency in the quality of site furnishings. The campus would generally benefit from a standardized palette of simple, rustic furnishings. Consistency and contextual considerations will improve the campus image and reduce maintenance costs.



BENCHES AND SITE FURNITURE

Site furniture includes both fixed and movable furniture, including benches and chairs. There are fine examples of hand-crafted benches, including a metal bench along a woodland path and a metal/stone bench at the entrance to the craft shop. The curved wooden and iron bench at the patio between the History Center and Keith House is a good example of a custom construction bench using traditional craftsmanship. There is a composite plastic bench mounted on the edge of the trail between Field House and Orchard House. There are simple wooden benches at the pavilion in the woods between Davidson Hall and Keith House. There are wooden rocking chairs and benches on the porches at Keith House. Other studio and residential buildings have furniture, often located on porches or patios.

Most of the handrails on campus are custom crafted metal rails that reflect the traditional craftsmanship of the blacksmith program.



BOLLARDS AND FENCES

Bollards are typically used to mark the location of utilities or restrict vehicular access. Most of the bollards on campus are 4"x 4" treated lumber. There are examples of plastic tube bollards.

There are a couple styles of fences on campus. They are used along the edges of fields, along the edges of roads, and as safety barriers. The most common fence type is a two-rail style mounted on 4"x 4" treated lumber. The two rail fences along Brasstown Road near Studio Row is of a smaller scale and serves to direct pedestrian circulation. There are also examples of one rail fences, including at the parking lot at Keith House. The two-rail fence along Brasstown Road, both at the entrance to campus and between Campus Core and South Campus, reflect the agricultural tradition of the school's history.



TRASH AND RECYCLING RECEPTACLES

There are trash and recycling receptacles placed outdoors on campus, usually located near buildings where people congregate, including Keith House and Olive Dame Campbell Dining Hall.



SIGNS

There is a great variety of signs on campus. The different styles suggest an accumulation of type over a long period of time. There are a few large signs on campus that serve as vehicular wayfinding features. Most of the signs on campus are smaller. The most common sign is a carved wood panel mounted on a wrought iron base. This style of sign is used for pedestrian wayfinding, showing the direction to different buildings on campus. The individual buildings on campus also have identification signs. These are often custom signs, reflective of the craft taught at the different studios. There are limited examples of interpretive signage, mostly near the Craft Shop, providing site history and a map of campus.



SITE LIGHTING

There is a great variety of light types on campus. There are street lights mounted on power poles along Brasstown Road that are publicly-owned. Most of the lights on campus are low-profile path lights. There are two common styles. The most common is a simple fixture mounted on a post. A second light appears on the path between Field House and South Campus. This light has the fixture contained within a wooden box. There are also larger pedestrian lights mounted at three crosswalk locations. These are handcrafted metal featuring human arms holding light fixtures.



LANDSCAPE PLANTINGS

There are a few garden areas on campus. These include the Moulton Garden, which plantings are in poor condition. The herb/kitchen garden at Davidson Hall is in good condition. A woodland garden exists in the interior of the loop driveway at Keith House. A few buildings have ornamental gardens marking their entrances. These include at the Woodcarving Studio, the Enameling/Ceramics Studio, the Painting Studio, and the Crafts Shop. Many buildings do not have or have minimal foundation plantings. The outstanding landscape characteristic of campus is the natural forest. Woods are a dominate feature of Campus Core, providing a natural setting for all of the buildings in this area. The woods form an edge around most of the other campus areas with specimen trees dotted throughout most of the campus areas. The exceptions are the open fields and the open lawn in North Campus.



VISUAL CLUTTER

Visual clutter results from an excess of small features that detract from the setting. This is a subjective category, but examples exist on campus where an overcrowding of utilities, equipment, fences, signs, and cars detract from the rural setting. Electrical power poles cross campus in various locations, where power lines cross over paths and buildings. HVAC and LP gas tanks are often located near the main entrances to buildings. Multiple additions of signs, fences, bollards accumulate on a site disturbing an otherwise beautiful setting.





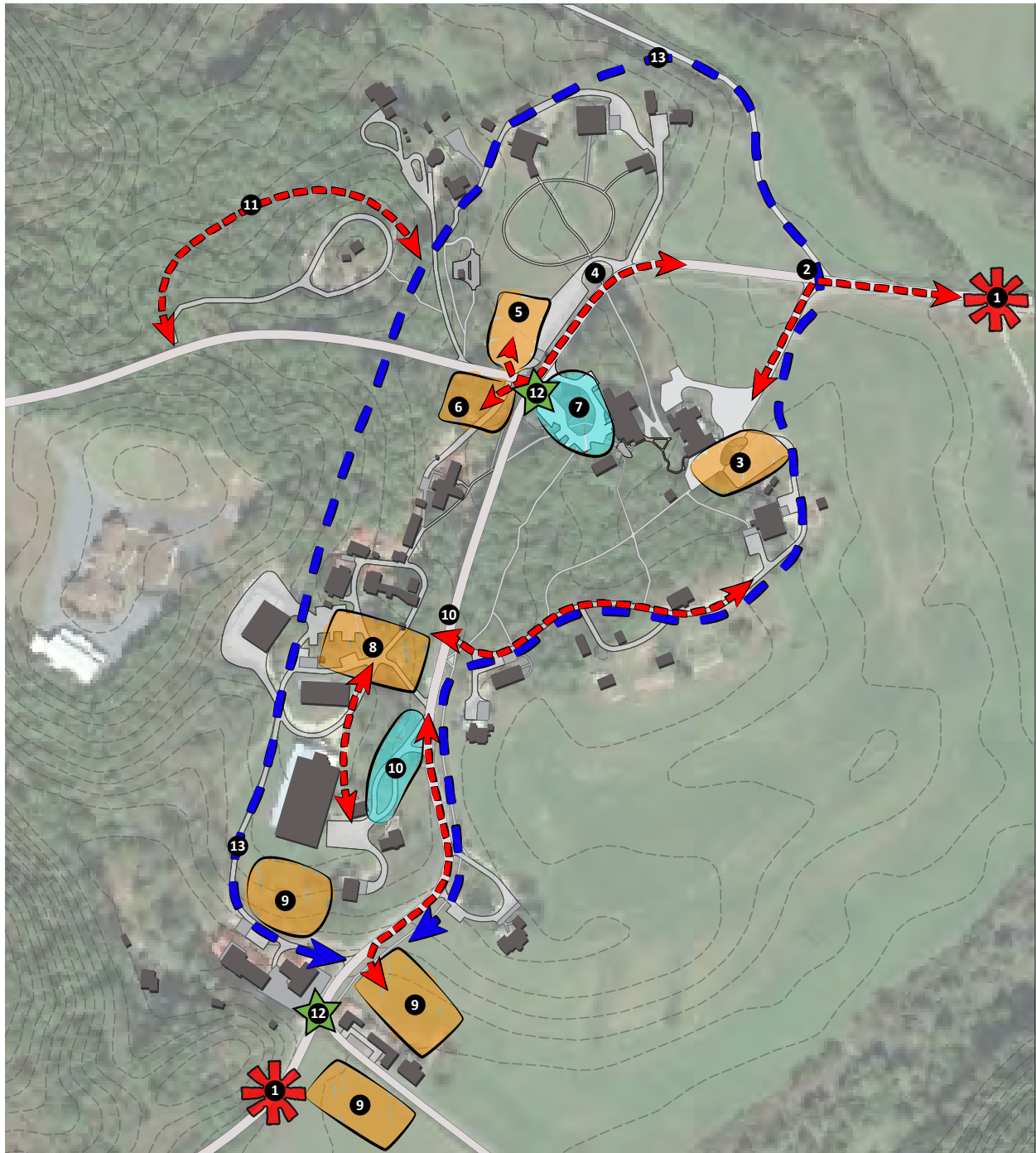
3. ISSUES & OPPORTUNITIES

ISSUES AND OPPORTUNITIES

The following illustrations present the results of the site analysis. The site analysis responds to the inventory of site elements and site history described in the previous section. The site analysis also responds to the identified needs and issues gathered through conversations with staff and information gathered during the strategic planning process.

During our analysis of the site, the planning team looked for opportunities to reinforce a village atmosphere on campus. Through many early design efforts, several opportunities became priorities for the design team.

- Locate new buildings in areas that reinforce the historic patterns of development or reinforce the unique character of existing spaces on campus;
- Enhance the pedestrian experience by creating clusters that include both educational and residential buildings;
- Parking should be centralized and distributed on campus to encourage pedestrian travel during the day;
- Develop landscape areas that connect different areas on campus.



VEHICULAR CIRCULATION ANALYSIS

CIRCULATION ANALYSIS

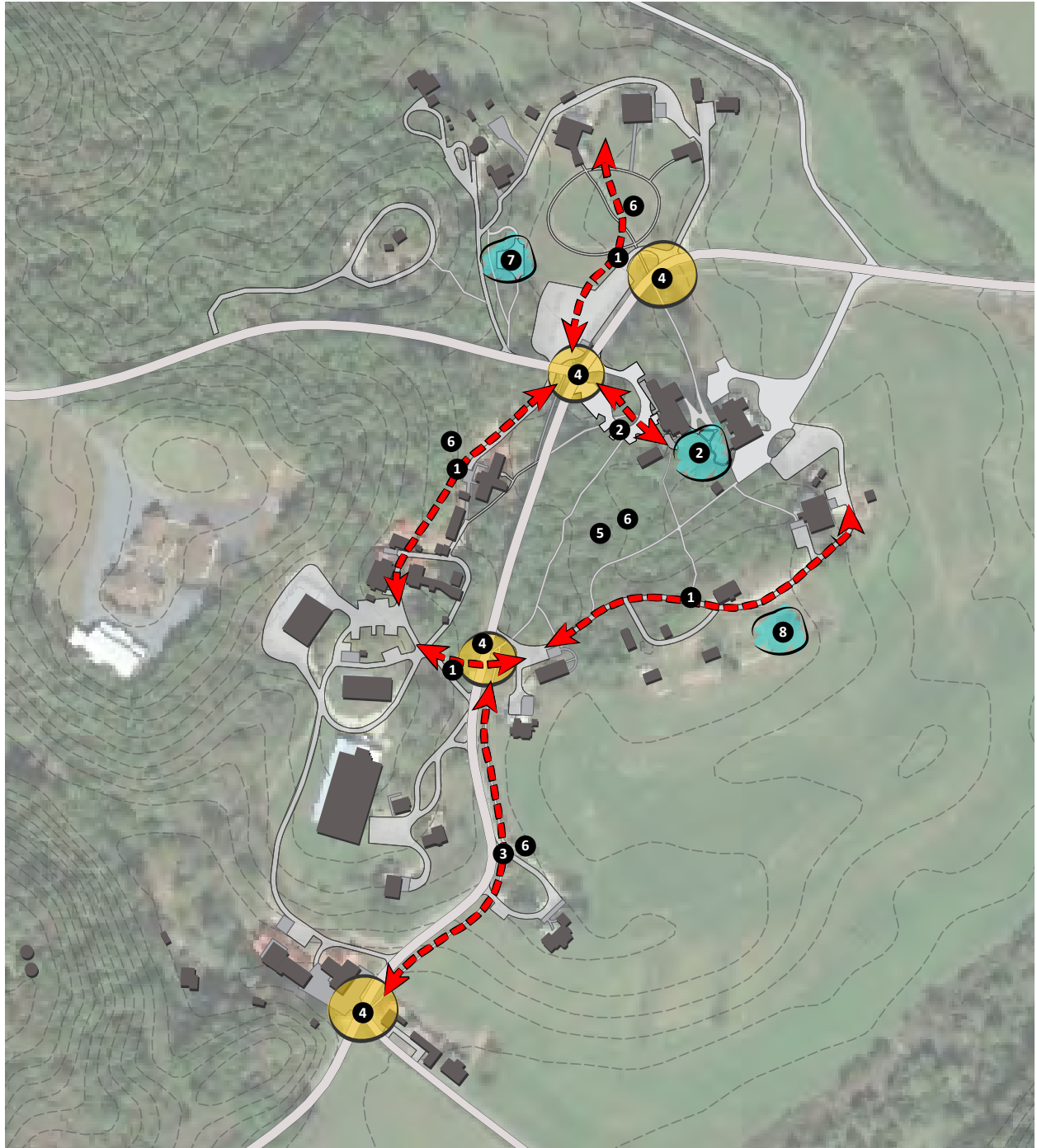
ISSUES: GATEWAYS AND VEHICULAR CIRCULATION

Vehicular infrastructure spreads across the entire campus. Individuals use their own vehicles to travel between areas of campus throughout the day. Although there are a few large parking lots on campus, parking is generally spread out, which detracts from the rural setting. Brasstown Road bisects campus and presents a safety issue with vehicular/pedestrian conflicts at multiple locations. Vehicular routes, in particular the entrance sequence, lacks a clear hierarchy to direct people to the appropriate location.

OPPORTUNITIES: GATEWAYS AND VEHICULAR CIRCULATION

Create a legible hierarchy of vehicular entrances, routes, and parking by improving wayfinding-signage and utilizing existing sight lines. Establish centralized parking areas in each campus area to congregate vehicles in specific areas and reduce interior vehicular traffic on campus.

1. Reinforce the Gateways onto campus with monumental signs and landscaping that define the campus threshold;
2. Establish primary entrance into campus at Davidson Lane and direct visitor traffic to parking lot at Olive Dame Campbell Dining Hall/Gift Shop;
3. Improve organization of parking lot at Davidson Hall;
4. Establish secondary entrance into campus at Harshaw Road and direct student traffic to parking lot across Brasstown Road from Keith House;
5. Improve organization and expand main parking area north of Harshaw Road;
6. Install second parking area south of Harshaw Road;
7. Reduce parking footprint at Keith House and convert to service and accessible spaces only;
8. Improve organization and expand parking area at Louise Pitman Fiber Arts Building;
9. Install new parking area on South Campus;
10. Redefine the vehicular entrances into Studio Row, eliminating drive to Farm House;
11. Develop second RV camp loop around base of existing campground;
12. Petition for installment of 3-way stops at Brasstown Road intersections with Harshaw Road and Folk School Road;
13. Develop connected internal road system;
14. Limit unauthorized parking areas with the strategic placement of bollards and fences to protect road edges.



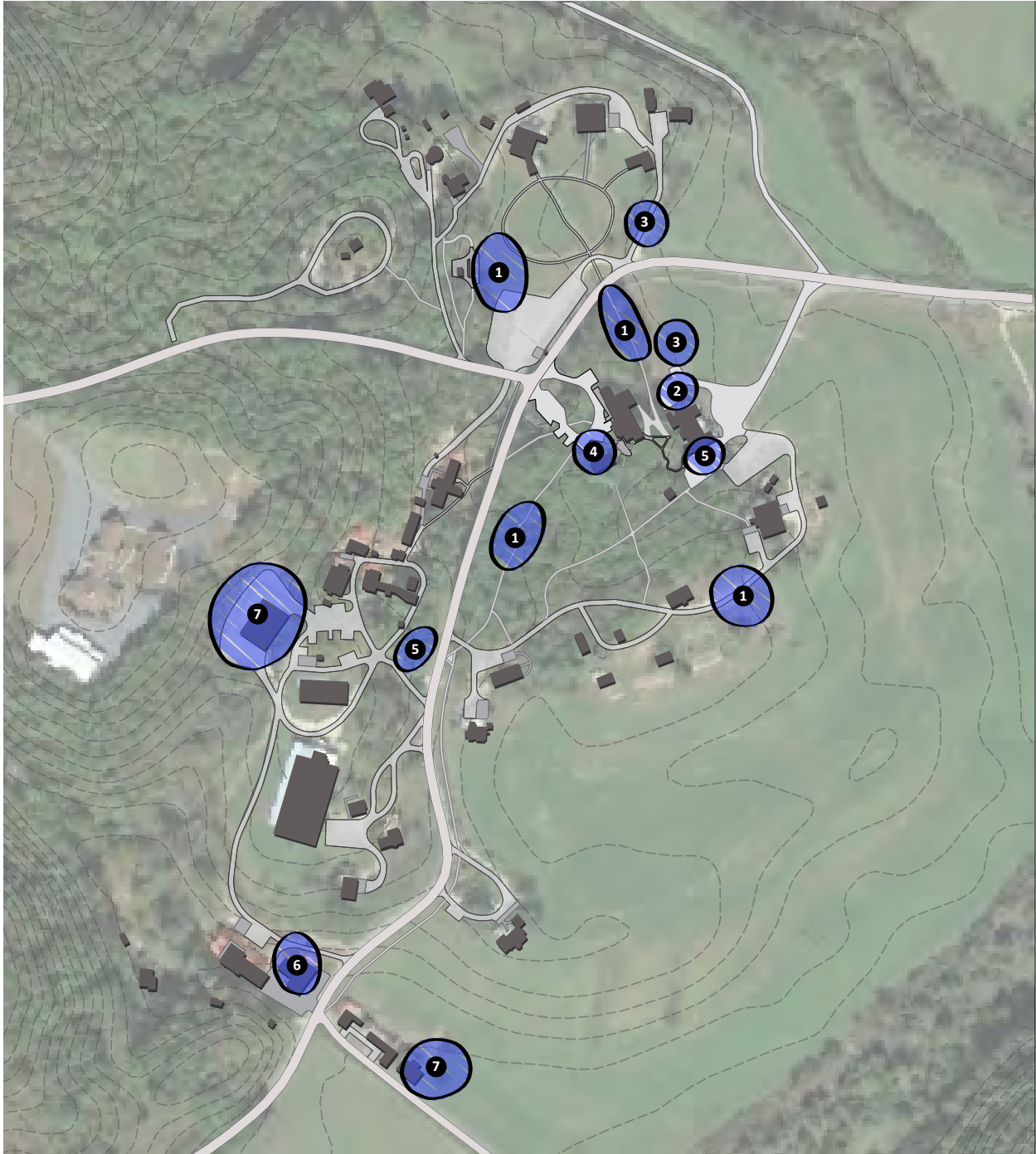
PEDESTRIAN ROUTES & PUBLIC SPACES

ISSUES: PEDESTRIAN ROUTES AND PUBLIC SPACES

The majority of pedestrian routes on campus are mulch or gravel paths. Many of the pedestrian routes do not meet ADA requirements. Several of the pedestrian routes cross Brasstown Road, creating potential safety issues.

OPPORTUNITIES: PEDESTRIAN ROUTES AND PUBLIC SPACES

1. Create primary pedestrian paths along accessible routes utilizing ADA compliant surface material;
2. Redesign major pedestrian routes between primary buildings to meet ADA design requirements, including redesigned plaza with integrated ADA route between Keith House and Olive Dame Campbell Dining Hall;
3. Resurface path to South Campus in an ADA compliant material;
4. Reduce the number of crosswalks and relocate as necessary to improve sight-lines and safety; Install safety features, including signage, road striping, and lighting;
5. Maintain secondary routes as natural woodland trails;
6. Provide lighting along pedestrian routes that conform to “Dark Sky” design recommendations;
7. Renovate Moulton Gardens as a gathering space, preserving existing hardscape features and improving visibility and access;
8. Develop gathering space near Garden;
9. Create trail links to perimeter trail around property.



ADMINISTRATIVE BUILDINGS POTENTIAL LOCATIONS

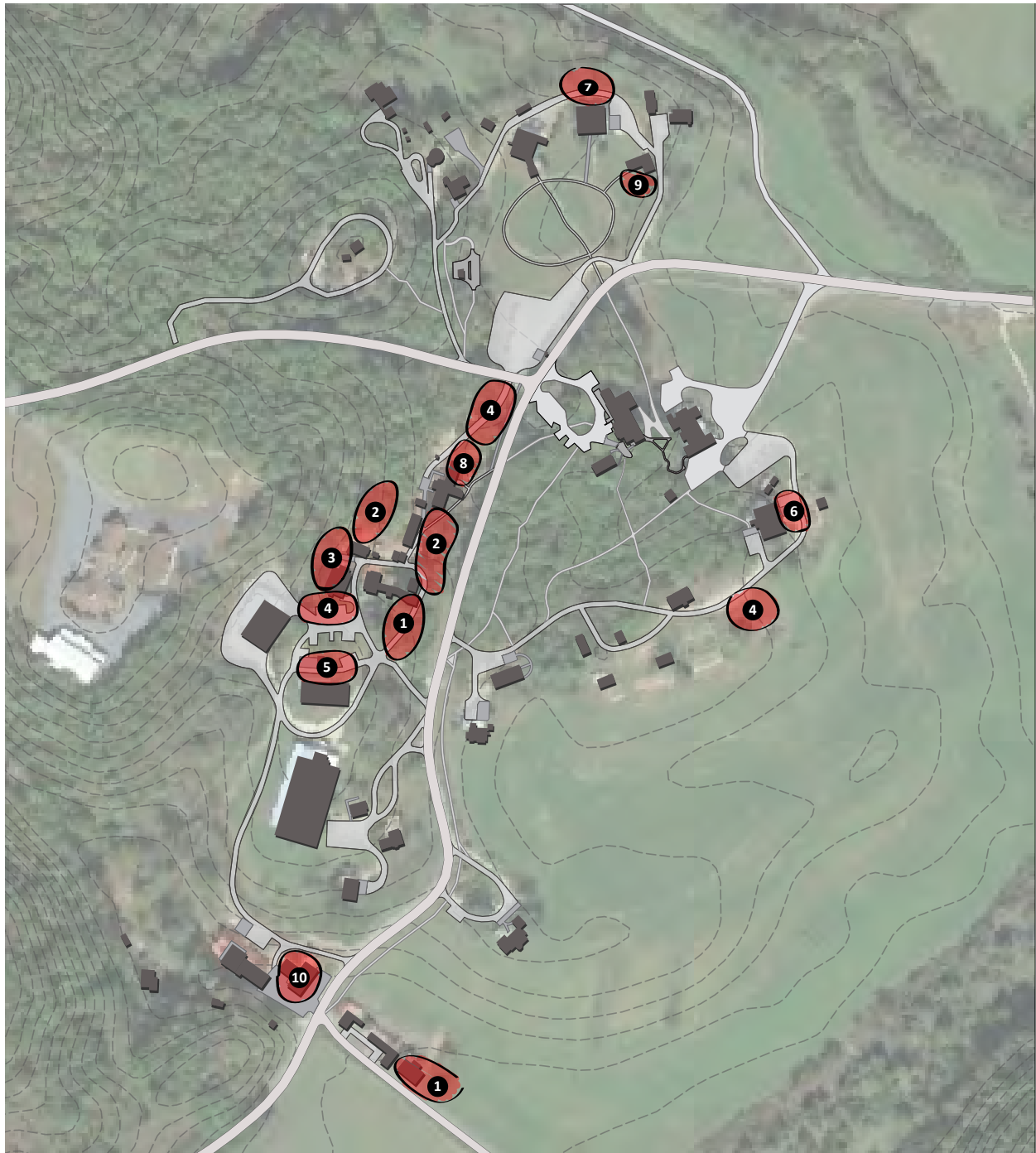
BUILDING ANALYSIS

EXISTING ISSUES: ADMINISTRATIVE BUILDINGS

The administrative staff is spread out on campus, occupying several buildings and spaces that could be better utilized for residential or education spaces. The existing dining hall is at capacity. After-hour services are limited. Services for visitors to campus visitors are limited. Community spaces and special event spaces are limited.

OPPORTUNITIES: ADMINISTRATIVE BUILDINGS

1. Construct a new dining facility to increase capacity and improve dining experience;
2. Convert existing dining facility to Visitor Center and provide limited services (i.e. sundry store/ coffee shop); Consider locating coffee shop in Lower Keith House;
3. Construct Archives and History Center;
4. Convert The Cottage to administrative use; Consider constructing additional office space;
5. Construct Kaleidoscope as feature to attract visitation to campus and to support glass program;
6. Convert Big Barn to flexible meeting and performance space; add flexible studio space on lower level;
7. Construct additional storage facilities for administrative, maintenance, and housekeeping use.



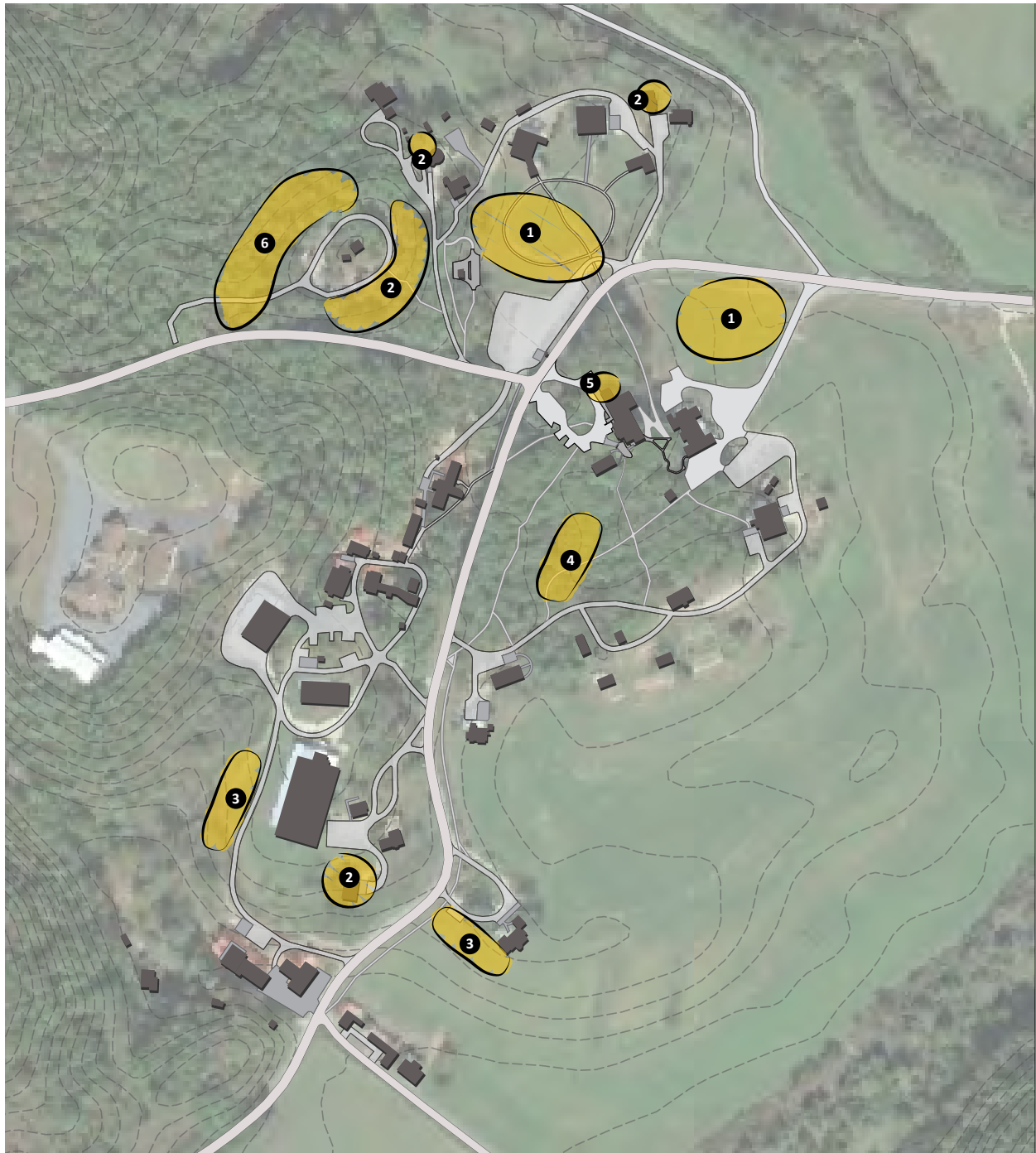
EDUCATIONAL STUDIO BUILDINGS POTENTIAL LOCATIONS

EXISTING ISSUES: EDUCATIONAL STUDIO BUILDINGS

Several of the educational buildings or individual studio spaces need renovation or expansion. Several studios are undersized, limiting the ability to expand popular programs. Some studio facilities lack adequate storage, restroom facilities, modern safety equipment, or are located in areas distant from similar studios.

OPPORTUNITIES: EDUCATIONAL STUDIO BUILDINGS

1. Construct new Woodworking Studio to improve teaching space, increase storage, and improve safety features;
2. Construct new Enameling and Glass Studio or construct addition onto Jewelry Studio to improve teaching space, increase storage, and improve safety features;
3. Expand Ceramic Studio to occupy entire building to expand teaching space, add glazing room, improve storage, and improve safety features; construct new Kiln Shed closer to Ceramics Studio;
4. Construct new Community Studio Building and flexible studio space;
5. Expand Louise Pitman Fiber Arts Studio to provide shared restroom facilities and to provide for relocation of other fiber related programs currently located in Davidson Hall;
6. Expand Cooking Studio into entire bottom floor of Davidson Hall;
7. Renovate and expand Painting Studio to increase storage, improve ventilation, and increase studio space;
8. Renovate existing Woodworking Studio to support additional educational programs;
9. Construct new outdoor workspace at Book and Paper Arts Studio;
10. Renovate lower level Big Barn into heavy metals and flexible studio space.



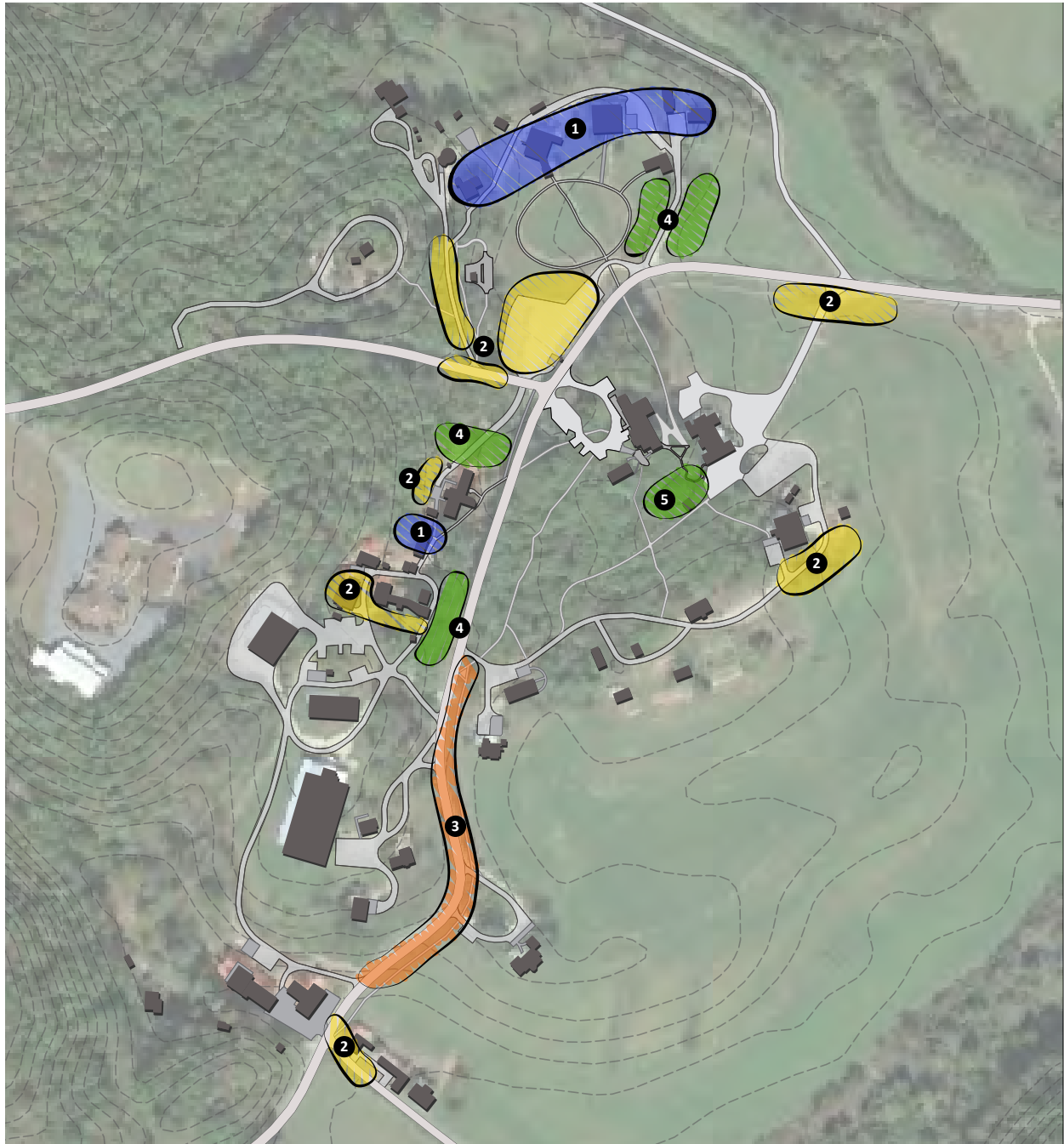
RESIDENTIAL BUILDINGS POTENTIAL LOCATIONS

EXISTING ISSUES: RESIDENTIAL BUILDINGS

Existing residential buildings limit opportunity for growth of student population and some fail to provide positive experience to students. Limited number of residential buildings complicates maintenance staff from renovating or addressing existing issues.

OPPORTUNITIES: RESIDENTIAL BUILDINGS

1. Construct centrally-located lodge style residential complex that offers different levels of accommodations;
2. Construct duplex and quadplex cottage-style housing on footprints of existing, substandard residential buildings; potential locations include Little Rock House, Hubbell House, and Campground
3. Construct new residential quarters closer to south section of campus to distribute student population;
4. Construct new residential quarters closer to Campus Core to distribute student population;
5. Renovate quarters in upper floors of Keith House;
6. Construct new RV loop to accommodate larger vehicles and potentially replace existing RV campground with smaller cottage-size quarters or yurt camping option.



STORMWATER INFRASTRUCTURE IMPROVEMENTS

STORM WATER ANALYSIS

EXISTING ISSUES: STORM WATER MANAGEMENT

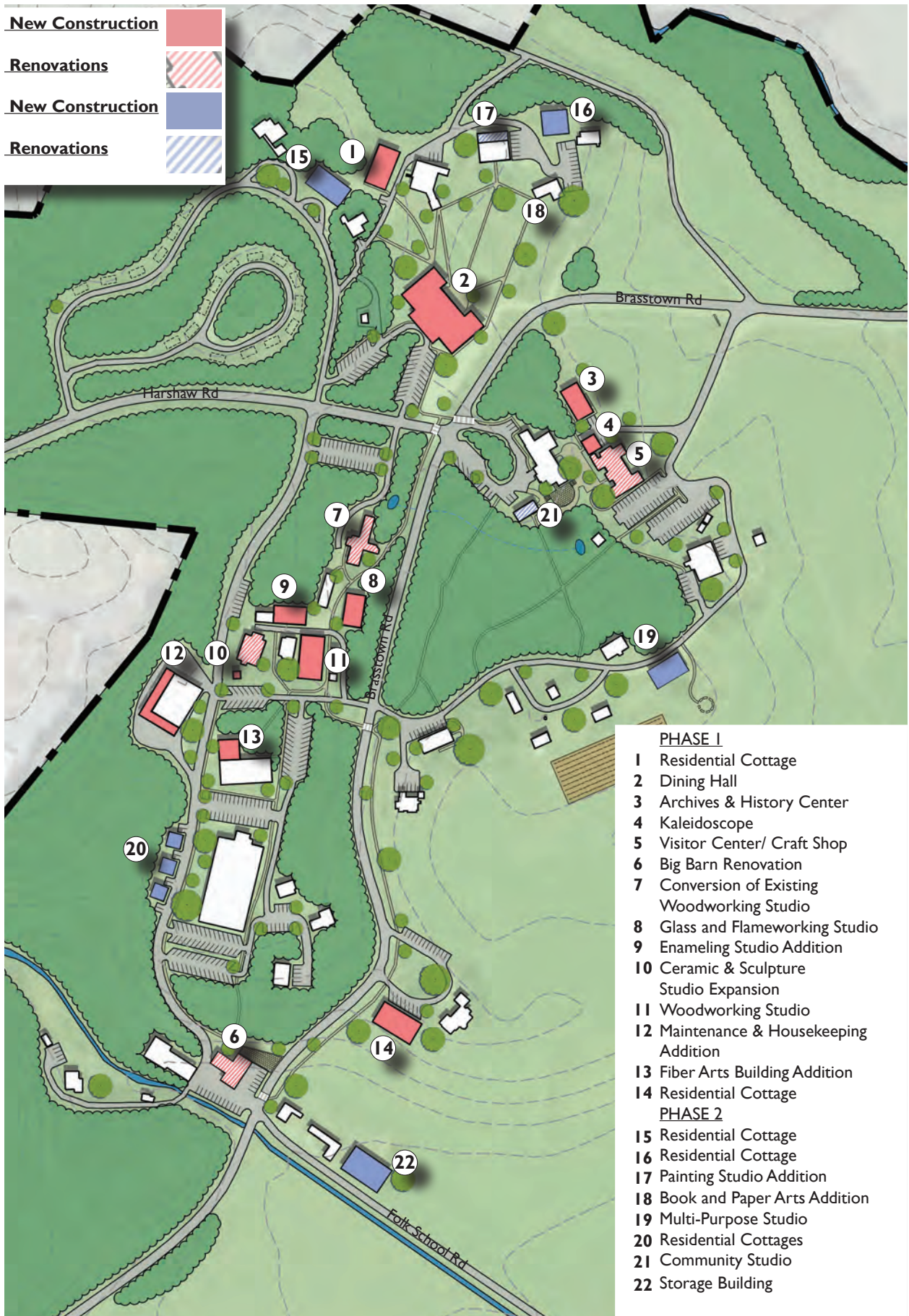
Many of the buildings on campus have undersized drainage features that result in ponding around their foundations or water intrusion into lower levels. Storm water run-off results in erosion on campus parking lots and along campus roads.

OPPORTUNITIES: STORM WATER MANAGEMENT

1. Install gutters, rain gardens, and install overflow storm pipe systems at buildings experiencing drainage issues, including Painting Studio, Woodturning Studio, Enameling/Ceramics Studio, Hill House, Rock House, and Woodcarving Studio;
2. Install vegetative bioretention areas with overflow storm pipe systems and improve vegetative drainage swales at parking lots and driveways that experience storm water erosion, including main parking lot, Louise Pitman Fiber Arts Building parking area, and Tower House;
3. Improve drainage swales and regrade road shoulder of Brasstown Road between Davidson Lane and Folk School Road;
4. Install bio-retention areas where possible to filter storm water before entering pipe systems, including area north of Woodworking Studio and in North Campus lawn area;
5. Install adequate overflow devices for current bio retention areas, including rain garden near Olive Dame Campbell Dining Hall.

A stylized illustration in a muted color palette (teal, grey, and brown) depicting two figures in traditional, flowing robes standing in front of a building. The building features a prominent central tower with a conical roof. The figures are positioned on either side of the tower, facing each other. The overall style is reminiscent of a woodcut or a traditional print.

4. RECOMMENDATIONS



MASTER PLAN

The purpose of this campus master plan is to provide an overall vision and framework for future development. As a decision-making tool, the campus master plan ensures that as the campus grows, it does so in a coherent fashion. It describes a general plan for development over the next twenty years so that immediate and long-range capital projects fit together and work within a final vision for the campus. It locates proposed buildings, creates new open spaces, improves circulation, and establishes standards for furnishings and building design. By looking at the final build-out, it also allows for flexibility, enabling the John C. Campbell Folk School to phase in change and respond to future needs. The development sites shown in the following illustrations provide capacity to accommodate potential growth over twenty years as well as options if growth trends change over time.

The illustrative master plan addresses space needs to support existing and proposed programs and accommodates potential enrollment growth. The plan shows footprints, but building design, program, and location will be refined as each project is developed from design to construction.

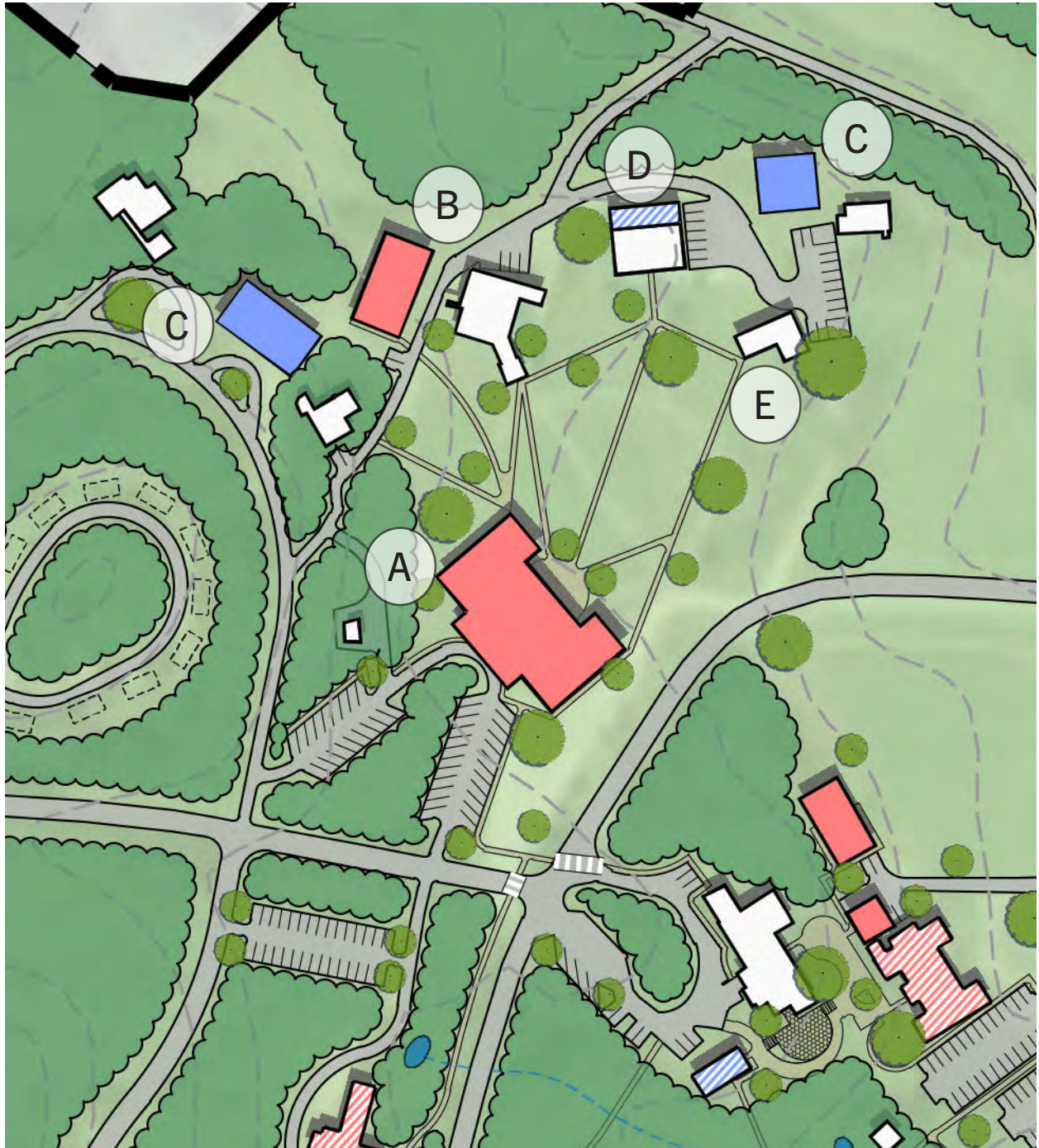
The goal is to encourage the siting of buildings to improve campus operations, support the educational programs, and reinforce the campus ambiance which is unique to the Folk School. The “sense of place” of the Folk School influences how the campus environment contributes to the inspirational aspects of working, learning, or simply being on campus.

SUSTAINABLE DESIGN

The Folk School has a long-term commitment towards integrating the built environment into the natural systems of its surrounding landscape. From its inception, stewardship of the natural environment has been a central part of the institutions mission. It is important to the Folk School that the designs for future buildings and landscapes incorporate the principles of sustainability. Building and landscape design, when adhering to the principles of sustainability, promotes the stewardship of natural resources and promotes a connection between people on campus and the natural beauty of the Folk School’s setting. Future projects should promote resource conservation, energy efficiency, and building and landscape durability.

This master plan proposes facilities and infrastructure based on activities and needs identified in the research phase. It proposes sites for future construction based on existing and expected user patterns. The process of selecting a site for different facilities examined the interconnected landscape characteristics, including natural resources, cultural features, and programmatic needs.

In general, it is recommended to develop previously disturbed sites when feasible. This minimizes disturbance of natural features during improvement projects. When developing site plans for future buildings, reduce the area required for intended improvement by minimizing road lengths, building footprints, length of utility connections, and limits of disturbance. Avoid stream channels, steep slopes, and mature vegetation. This helps reduce site-preparation costs and preserves visual and ecological features.



NORTH CAMPUS



FIRST PHASE



SECOND PHASE

NORTH CAMPUS QUAD

First Phase

A. Dining Hall

Construct a new two-story Dining Hall (approximately 30,000 sf) on the west side of Brasstown Road to enhance connectivity between the different areas of campus. The dining hall is one of the most important buildings on campus, because it where most people congregate as a community during time outside of studio.

A well-designed dining hall improves the on-campus experience and assists with the recruitment and retainment of future students. A larger dining room allows the Folk School to plan for and accommodate future increases in student enrollment. A new dining room also addresses limitations of existing dining hall, including inadequate cooler and freezer space, inefficient kitchen design, and improves dining room layout.

The second story of the new building provides office space for Folk School staff, allowing an opportunity to relocate some administrative services into one convenient location. Relocating some of the administrative offices from the Keith House will also help ease the wear and tear on that historic structure.

B. New Residential Building

Construct one two-story, eight-unit residential cottage (approximately 9,600 sf) across the road from the Woodturning Studio. This location increases residential options near studios on this side of campus. The site has excellent views; and the topography offers an opportunity to provide direct access to both levels.

Second Phase

C. Additional Residential Expansion

Depending upon need, the recommendation is to add additional eight-unit residential buildings to meet projected enrollment growth.

One option is to replicate the eight-unit model developed in the first phase and replace existing housing that either does not maximize use of space or contribute to the Folk School campus aesthetic. The proposed building sites include replacing Hubbell House and Little Rock House. Replacing Hubbell House offers an opportunity to develop a structure that fits in with the overall campus aesthetic. Replacing Little Rock house removes a building that is in poor condition. Both building sites offer an opportunity to develop two-story buildings with direct access to each level.

D. Expansion of Painting Studio

If the painting program continues to grow, the recommendation is to enclose the rear porch to provide the opportunity to increase storage and studio space. The project should also prioritize upgrades to the ventilation system.

E. Addition of outdoor workspace at Paper Arts Studio

Create an outdoor work space for Paper Arts Studio.



CAMPUS CORE



FIRST PHASE



SECOND PHASE

REVITALIZED CAMPUS CORE

First Phase

A. Convert existing Dining Hall into Visitor Center, Craft Shop, and Supply Store

With the construction of a new Dining Hall, the existing Dining Hall is converted into the John C. Campbell Folk School Visitor Center. This building is visually prominent and naturally draws people into its parking lot. The Visitor Center and Craft Shop located on the upper level will serve as primary point of contact for people visiting campus. Moving the Craft Shop upstairs expands available retail space and increases storage space. The lower level is converted into a supply store.

The existing parking lots continue to serve the Visitor Center. Accessible parking will be on the north side of the Visitor Center, where an accessible route to the main entrance can be developed. This parking lot also serves as the primary delivery and service point for the campus.

B. Kaleidoscope

Construct a kaleidoscope adjoining the north façade of the Visitor Center. A kaleidoscope is a marketing and community-outreach opportunity. This building will attract visitors to campus and highlight the glass and kaleidoscope studio programs. A kaleidoscope in this location can be monitored by staff in the Visitor Center and is in the most accessible location for visitors.

C. Archives and History Center

Construct a new Archives and History Center building north of the future Visitor Center. An improved Archives and History building is an opportunity for staff, instructors, and students to access information relevant to contemporary studio work. The Archives and History Center building includes a study room for classes and research, two exhibition spaces, and collection storage. The exhibition spaces will highlight both historic and contemporary crafts by students and instructors. The exhibition space also allows for visiting exhibits.

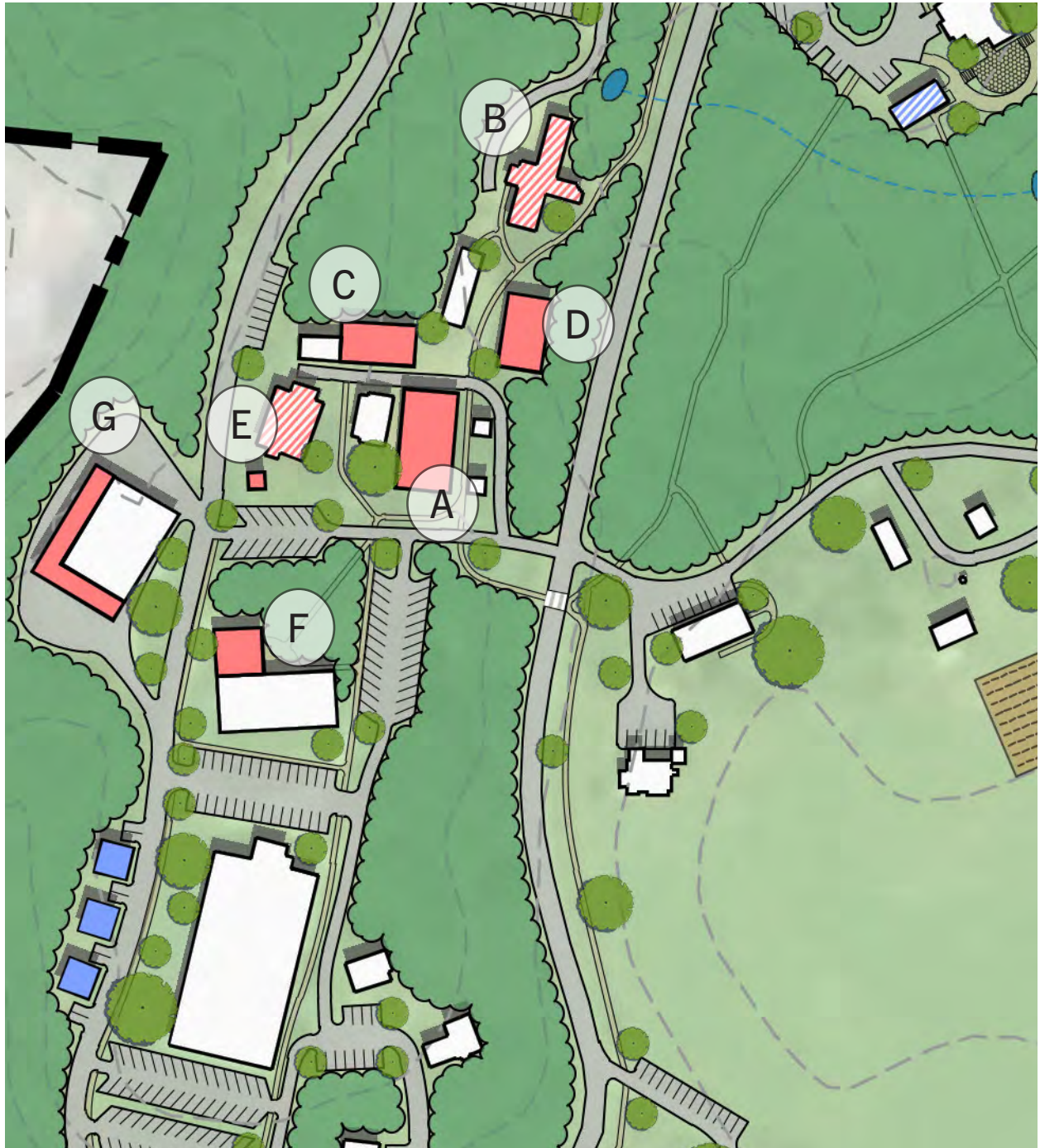
Second Phase

D. Community Studio and Flexible Studio

The exhibit at the current history center moves to the new Archives and History building, which allows the existing History Center building to be repurposed into a Community Studio. This will include community outreach programs and serve other community-oriented activities like the Brasstown Carvers. The building can also serve other studio programs during the year as needed.

E. Multi-purpose Studio

Construct a multi-purpose studio (approximately 2,500 sf) on the knoll overlooking the open field near the Folk School Garden for various studio programs.



STUDIO ROW



FIRST PHASE



SECOND PHASE

EXPANDED STUDIO ROW

First Phase

A. Woodworking Studio

Construct a new Woodworking Studio (approximately 5,000 sf) adjacent to the Woodcarving Studio. The Sawmill can be relocated and interpreted or stored for future restoration. This location enhances Studio Row, keeps the Woodworking program near the center of campus, and strengthens the programmatic relationship with Woodcarving. This location also has sufficient vehicular access for deliveries and is adjacent to the Wood Storage Barn.

The construction of a new studio improves the woodworking program and creates a safer and more efficient working environment for instructors and students. The new studio features a larger bench room, larger machine room, and a separate room for finishing/sanding. Important safety improvements could be incorporated into the new building including dust collection and adequate space around power tools.

B. Conversion of existing Woodworking Studio

With relocation of Woodworking Studio, the existing building is renovated to accommodate different studios or be converted to support expanding programs like leather and lutherie.

C. Enameling Studio (Addition onto existing Jewelry Studio)

Add a studio wing (approximately 3,000 sf) onto the existing Jewelry Studio to become the new Enameling Studio. This location promotes program adjacency and allows for the convenient use of similar equipment. The Enameling Studio contains two studio spaces with appropriate kilns in each studio, proper ventilation, hard-piped gas lines for flameworking, storage areas, and a bathroom. During renovation, the Jewelry Studio could also include HVAC/ventilation upgrades and enlargement of storage space. Copper and Tin programs can be relocated to another studio, possibly in lower level of renovated Big Barn.

D. Glass and Flameworking Studio

Construct a new building (approximately 3,600 sf) with two studios—one kaleidoscope/flat glass studio and a flameworking studio—in Studio Row. This building would support multiple programs, including flameworking, kaleidoscope, and stained-glass classes. The structure would feature appropriate kilns in each studio, proper ventilation equipment, and hard-piped gas lines.

E. Expand Ceramic & Sculpture Studio

With the relocation of the Enameling Studio, the current building is renovated into a larger Ceramic and Sculpture Studio. The renovation converts the current Enameling Studio into a studio for hand building, glazing room, and storage rooms. Renovation will include improved bathroom facilities, an improved ventilation system for glazing, and relocated kilns.

F. Addition onto Louise Pitman Fiber Arts Building

An addition (approximately 1,500 sf) onto the building would include a new studio, a centralized bathroom, improved storage, and a laundry facility. The relocation of the dye studio into the Louise Pitman Fiber Arts Building (dyeing, felt making, knitting and spinning) would allow the current Wet Room at Davidson Hall to be used for other studios or allow for an expansion of the cooking studio.

G. Maintenance and Housekeeping Addition

Enclose rear area of Maintenance and Housekeeping building to enlarge the usable workspace for the two departments.



SOUTH CAMPUS



FIRST PHASE



SECOND PHASE

DIVERSIFIED SOUTH CAMPUS

FIRST PHASE

A. New Residential Building

Recommendation is to construct one two-story eight-unit residential cottage (approximately 9,600 sf) near Orchard House. This location distributes additional residential options closer to the south end of campus, which will enhance pedestrian connectivity. This location offers excellent views and accessibility. The topography can be utilized to offer direct access to both floors of the buildings.

B. Big Barn

The recommendation is to renovate the Big Barn into studio space and as a flexible event space. The upper level can be used as a dance studio, meeting space, or special event space. The lower level can be converted into studio space for work-study, host, resident, or as a work-space for the heavy metals program.

SECOND PHASE

C. Additional Residential Expansion

Depending upon need, the recommendation is to add residential units to meet projected enrollment growth.

One option is to construct three four-unit residential cottages along the road between the Festival Barn and Blacksmith Shop. This location provides easy pedestrian access to both South Campus and Studio Row. One unit can be designed as a bunk-style option. These smaller units provide an opportunity to create different accommodation levels with different price points.

D. Storage Building

Construct a multi-use storage building on the footprint of the existing Red Barn. The building should be designed to support multiple administrative departments.



CIRCULATION

CIRCULATION RECOMMENDATIONS

The goal of the following recommendations is improving campus connectivity and improving safety for both motorists and pedestrians. The recommendations create an environment that promotes pedestrian-oriented outdoor spaces, provides efficient connections between different areas of campus, and encourages interaction with the natural environment. The components of these recommendations include vehicular circulation, including both roads and parking areas; pedestrian circulation, including walkways, paths, and trails; and crosswalks, which address vehicular/pedestrian conflicts on campus.

VEHICULAR CIRCULATION

Vehicular circulation concerns include both external and internal factors. External concerns include the impact that public roads have on the campus. Most significantly, Brasstown Road bisects campus, creating vehicular/pedestrian conflicts on campus. Internal vehicular issues are less problematic, but include informal parking areas that have evolved as people on campus seek parking spaces close to studios.

The intent of the proposed parking areas is to distribute designated parking to different areas of campus. Implementation of the building recommendations will displace a number of existing parking spaces, but the plan also proposes several new parking areas that can be developed to off-set any temporary losses during construction. Combined with clustering studios, the new parking areas will promote parking in designated lots and discourage parking in open spaces that detract from the visual character of the campus.

Parking development should be done based on observed need. Developing parking areas include capital costs and associated maintenance costs. Encouraging pedestrian connectivity, through studio clustering and relocating the dining hall, will hopefully reduce the need for unnecessarily expanding parking areas, which also have associated environmental impacts.

1. **Brasstown Road Improvements**

Coordinate with the county to place additional speed limit signs bracketing the area of Brasstown Road where there are crosswalks. These would include additional speed limit signs just south of Folk School Road and one east of Rockhouse Road. These would clarify and reinforce the speed limit through campus.

Coordinate with the county to convert major intersections in middle of campus into three-way stops. This would include the intersection of Brasstown Road and Harshaw Road and the intersection of Brasstown Road and Folk School Road.



2. **Parking Areas at Harshaw Road**

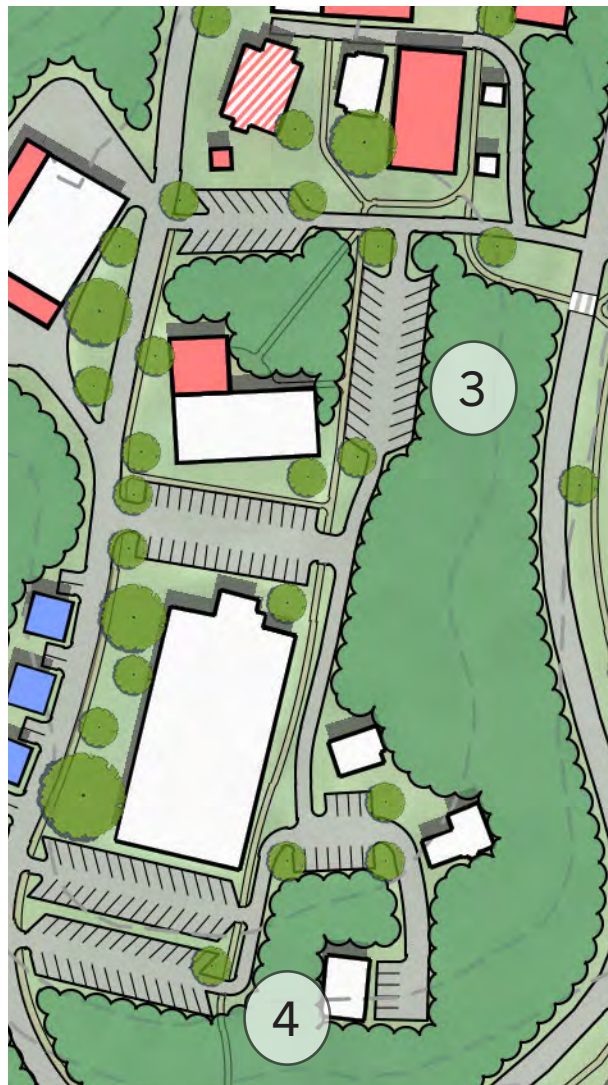
Develop parking areas adjacent to the proposed new Dining Hall and on opposite side of Harshaw Road. Both parking areas should be configured to preserve existing mature vegetation and located to preserve a buffer of vegetation between the road and parking area.

3. **Parking Areas in Studio Row**

Develop formalized parking areas in Studio Row. The main lot would be off Brasstown Road, with secondary lots located between the Louise Pitman Fiber Arts Building and the Festival Barn and between the Louise Pitman Fiber Arts Building and the Ceramics Studio. These lots involve widening existing roads, resulting in the minimal amount of grading and disturbance. During design phase, the lots can be configured to preserve existing mature vegetation.

4. **Parking Area at Festival Barn**

Develop formalized parking area in open area south of Festival Barn. This location will serve both Studio Row and the Blacksmith/Big Barn complex. The design will likely include terraces to accommodate the existing grade.





5. New RV/Camping Loop Road

Develop a second RV loop road below the current campground. Design road to accommodate larger RV's. Consider converting existing RV lots to alternative campground offerings, including simple shelters or yurt-style camp facilities.



6. Parking Areas between Davidson Hall and future Visitor Center

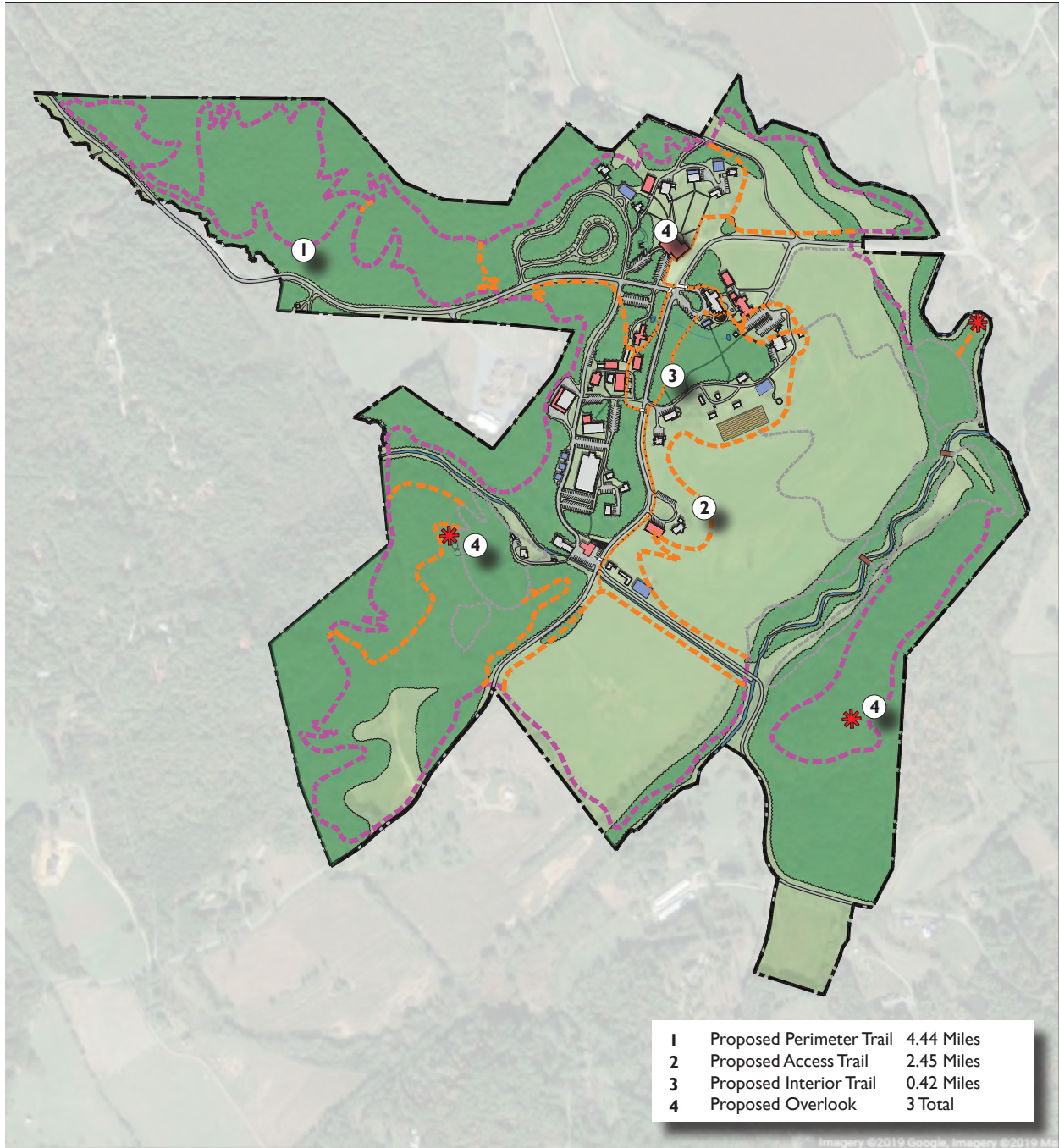
Reconfigure the lot at Davidson Hall to maximize use of available space.

7. New Service Loop Road

Develop new secondary campus road west of Studio Row, between Harshaw Road and Blacksmith/Big Barn complex. The new section of the road aligns with on the north with Martin's Nest Lane, crosses through the woods west of the current Woodworking Studio, and joins the existing service road west of the Louise Pitman Fiber Arts Building. North of Harshaw Road, the road connects with Scroggs Road. This eliminates the section of Rock House Lane that connects with Brasstown Road, removing an intersection with limited sight lines.

8. Mill House and Blacksmith Complex Road Connection

Study the feasibility of creating a connection between the road to Mill House and the parking lot at the Blacksmith/Big Barn complex. This would eliminate a driveway with limited sight lines, but would require a bridge to span the creek.



EXISTING AND PROPOSED TRAIL NETWORK

PEDESTRIAN CIRCULATION

Well-designed walkways and paths promote pedestrian connectivity on campus when combined with centrally-located parking areas. The mountainous terrain makes ADA accessibility a challenge. No single design can be implemented across campus, but all walkways should strive to provide a safe and stable walking surface using an ADA-compliant material.

1. Walkway Improvements

Develop direct connections between different areas of campus, adding new paths to integrate new buildings into the pedestrian system. Utilize existing vehicular routes where vehicular traffic is low to reduce the amount of new infrastructure; this includes Davidson Lane for example.

2. Accessible Routes to Primary Buildings

Develop routes between primary buildings that meet ADA design requirements. Redesign the plaza space between Keith House and Olive Dame Campbell Dining Hall to integrate an ADA-compliant ramp.

3. Expand Trail System

Develop a trail system that connects existing trails and adds a perimeter trail to provide access to multiple areas of campus. The perimeter trail adds approximately four miles to the current trail system. It is intended for these to be natural trails, relatively narrow with an average grade between 5 and 10 percent. Trails steeper than 20 percent are more difficult to maintain and are more susceptible to erosion. The trails should have spurs to locations that provide vistas towards campus or to other scenic resources.

Material recommendations for pedestrian improvements

Use permeable paving materials that allow for rain water infiltration where feasible, particularly for secondary paths, walkways, and roads. Where necessary to use paved hardscape, paving material should be selected for durability to withstand wear and minimize maintenance.

Consider using an ADA-compliant walkway of natural crushed stone bound with a binding agent or placed in a reinforced grid system on high traffic paths or in areas with steep slopes. A reinforced plastic grid holds the aggregate in place and distributes the point load of pedestrian traffic or light-duty service vehicles. The best results are achieved using an edge restraint and a hard aggregate like crushed stone or decomposed granite.

The trail system is intended to be native soil. The preferred construction technique for trails include full-bench construction which involves excavating to a stable surface. This requires more excavation but results in a more durable, lower maintenance trail.

See additional information on gravel paving on page 115 and 116.



PEDESTRIAN-VEHICULAR CONFLICTS

Improved crosswalks will address safety considerations regarding pedestrian and vehicular conflicts. While no single design can be applied to each situation, it is recommended that the crosswalks be upgraded to include additional striping, lighting, and signage. As mentioned above, it is also recommended to install additional speed limit signs on Brasstown Road and to install three-way stops at its intersections with Folk School Road and Harshaw Road. Additionally, the construction of a new dining hall west of Brasstown Road will reduce the number of pedestrians crossing.

Crosswalks should have a high-visibility crosswalk pattern, such as a ladder or diagonal stripes. The Folk School should coordinate with the county to implement additional safety features, including in-street signs and flashing signs. In-street signs are mounted in the roadway, so are more feasible if the intersections become three-way stops. Flashing beacons or flashing signs can be mounted at the crosswalks and activated by pedestrians. The flashing signs can also be connected to a second sign located an appropriate distance before the crosswalk. All crosswalks and safety devices should be designed in accordance with current standards in the Manual on Uniform Traffic Control Devices.

1. **Eliminate Cross Walk between North Campus and path to Dining Hall**

The Folk School should consider closing off this pedestrian crossing and instead provide a well-designed and aesthetic path to an improved crosswalk near the intersection of Brasstown Road and Harshaw Road.

2. **Improve Main Crosswalks at Harshaw Road/Brasstown Road Intersection**

Provide striped crosswalk with signage on both legs of the intersection of Brasstown Road and Harshaw Road. As mentioned above, this should also become a three-way stop intersection. The existing accessible parking spaces in the parking lot should be removed and relocated to the Keith House parking area to discourage mobility-impaired guests from using this crosswalk until other safety measures are implement. Directional signage should be provided in the main parking area to direct these drivers to the accessible parking areas. Some re-work of the Keith House area parking will be needed to meet state and federal accessibility codes.

3. **Eliminate Crosswalk from Keith House to Woodworking Studio Path**

Direct pedestrian traffic to improved crosswalk at the intersection of Harshaw Road and Brasstown Road.

4. **Improve Crosswalk from Davidson Lane to Studio Row**

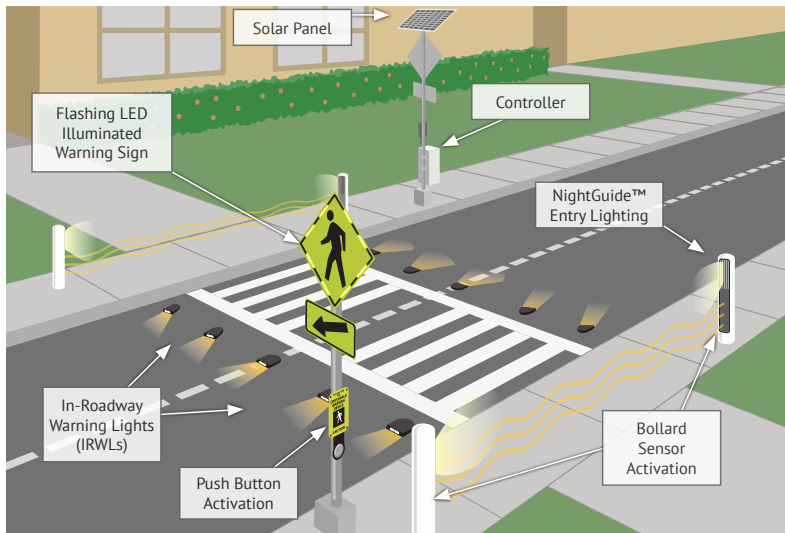
Relocate small trees growing close to the road and blocking views to the south on Brasstown Road. Install safety features described above including striping and signage.

5. **Improve Crosswalk across Brasstown Road at Folk School Road**

Install features described above for the Brasstown Road and Harshaw Road intersection, including a three way stop, striping, and signage.



Concept for improving main crosswalk



Standards for “Smart Crosswalks”

STORMWATER

STORMWATER RECOMMENDATIONS

Low Impact Development (LID) and Green Infrastructure (GI) should be integrated into designs of future projects. Site design that incorporates LID features into stormwater management promotes a more sustainable system that reduces run-off and improves water quality. Because much of the current stormwater runoff is managed in road-side swales, it is recommended to implement strategies that reduces the amount of surface runoff that goes into the swales by treating more stormwater on site. Integrated landscape design strategies for improved stormwater management include placing bioretention areas in parking lots; using permeable pavements for walkways, parking lots, and patios; and including canopy trees to intercept rain.

CAMPUS-WIDE STORM PIPE UPGRADES

Traditional closed systems will continue to be necessary, in particular where stormwater must be conveyed under roads and drives. Currently, numerous pipes on campus are undersized and feature corrugated plastic that is liable to failure under vehicular loads. Assuming a 0.5% slope, all existing pipes analyzed on campus have less than a 2-year level-of-service (LOS); meaning that the pipe would need to be upsized in order to handle the flow to the pipe in rain events greater than the 2-year event. Most culverts should be between 12" and 18" diameter and be constructed of corrugated metal or reinforced concrete when used under paths or drives.

INTEGRATE OPEN AND CLOSED SYSTEMS AT PARKING LOTS

Gravel parking lots should be graded to divert stormwater into swales and bioinfiltration basins such as raingardens. These will need to be designed with overflow structures in the event of large storm events. Water can overflow to adjacent swales or be diverted to a series of pocket pond infiltration basins, designed to temporarily detain and infiltrate stormwater runoff.



Example of a rock lined swale with check dams designed to slow the flow of stormwater

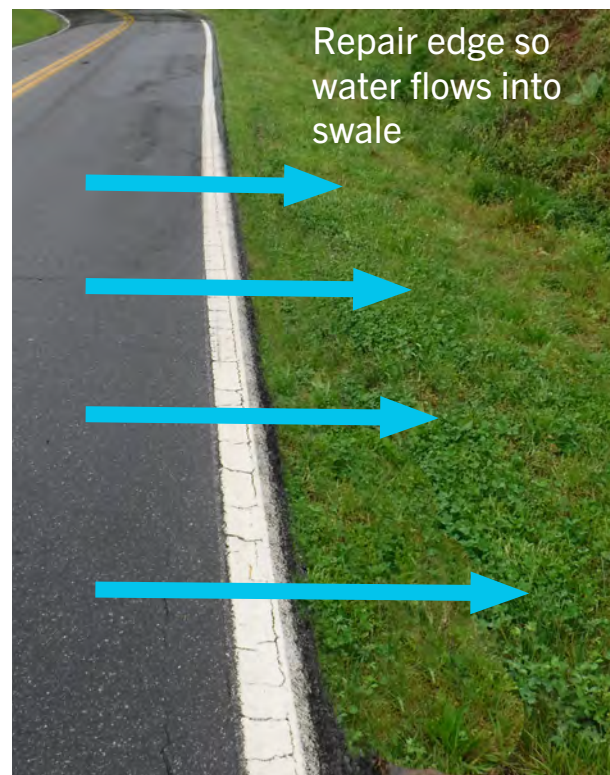
REPAIR ROAD SHOULDERS AND SWALES

Repair the shoulders and drainage swales adjacent to campus roads to better manage stormwater runoff.

Brasstown Road Shoulder and Swale Improvements

Regrade driveway to Studio Row and repair existing drain inlet and pipe to control conveyance of stormwater to swale along west side of Brasstown Road. Repair road shoulder along east side of Brasstown Road to allow water to flow into vegetated slope between road and fields. This will redirect stormwater away from road and allow it to infiltrate in the open field east of Brasstown Road.

Repair shoulder and swale along west side of Brasstown Road so stormwater can enter swale and be directed to closed pipe system downhill near Big Barn. This will prevent water from flowing across Brasstown Road, reducing the erosion at the corner of Brasstown Road and Folk School Road. The swales can incorporate stone check dams, slowing water flow and improving infiltration. Install inlet and pipe system to convey water from Folk School Road intersection to pass under existing driveways and outlet into grassy area east of Red Barn.



INSTALL BIOSWALES AND RAIN GARDENS (BIORETENTION STORMWATER TREATMENT SYSTEMS)

Woodworking Studio Drainage Issues

To improve stormwater management along the Woodworking Studio driveway, deepen the drainage swale on the west side of the drive, raise the profile of the driveway at the culvert location to prevent sheet-flow, and increase the diameter of the culvert.

The open space north of the Woodworking Studio and downstream of the proposed new culvert is often soggy and prone to standing water. Two options to improve the conditions of this area include:

- install a bioswale/rain garden;
- install a closed drainage system, which may require state and federal wetlands permits.

A bioswale is an open, gently sloped vegetated channel designed to treat and convey stormwater runoff. It is more environmentally friendly than traditional closed systems and offers an opportunity to create an attractive native garden area. The bioswale/rain garden should be designed with an overflow structure that would lead to the closed drainage system leading under Brasstown Road.



Stormwater flow at Woodworking Studio



Example of rock lined bioswale with native plantings



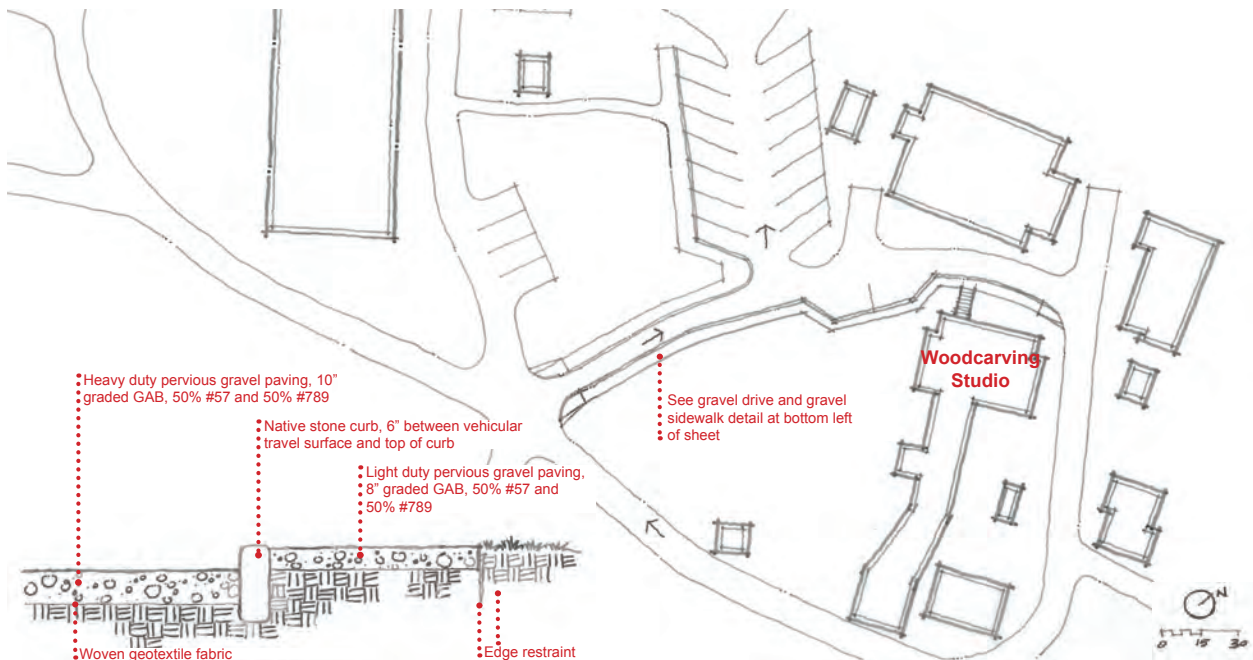
Concept for rock lined bioswale with native plantings at Woodworking Studio



Native
stone



Install gutter and downpipes on
Woodcarving Studio



Concept for improving curbing and water flow for Woodcarving Studio

Woodcarving Studio

The Woodcarving Studio receives runoff from the ponded area behind the Enameling/Ceramics Studio, adjacent driveways, and surrounding lawn areas. It is recommended to install gutters and downspouts on the studio's porch and install a trench drain along the edge of the porch. Downspouts should direct water away from the structure. The water ponding behind the Enameling/Ceramics Studio can be conveyed in a closed drain system to an area away from adjacent buildings and outlet into the open space near Brasstown Road. This would involve installation of new inlet and new drainpipe. The outlet of the drainpipe can lead to a bioswale/rain garden which will improve water quality and promote infiltration. The bioswale/rain garden should be designed to overflow into the swale system along Brasstown Road.

North Campus

Install a raingarden at the drainage collection point near the Book and Paper Arts Studio. Currently, the existing drain inlet has failed and water is scouring new paths through the hillside along Rockhouse Road. Use a rain garden to pond collected water and direct overflow into a closed system that outlets into open field east of Rockhouse Road. Install level spreaders or vegetated filter strips in open field to spread water and prevent channelized flows.

Deepen the swale along the west side of Rockhouse Road, integrating stone check dams to slow water and encourage infiltration. Install inlet and culvert to convey water to another location in the open field east of the road away from the outlet of the North Campus drain system.

In addition to level spreaders, the open field east of Scroggs Road can be developed into a shallow impound area to temporarily detain and infiltrate stormwater runoff. These infiltration basins are not designed to hold a permanent pool of water, but improve water quality by filtering stormwater runoff through the soil and recharging the groundwater supply.

Renovate Rain Garden at Craft Shop Parking Lot

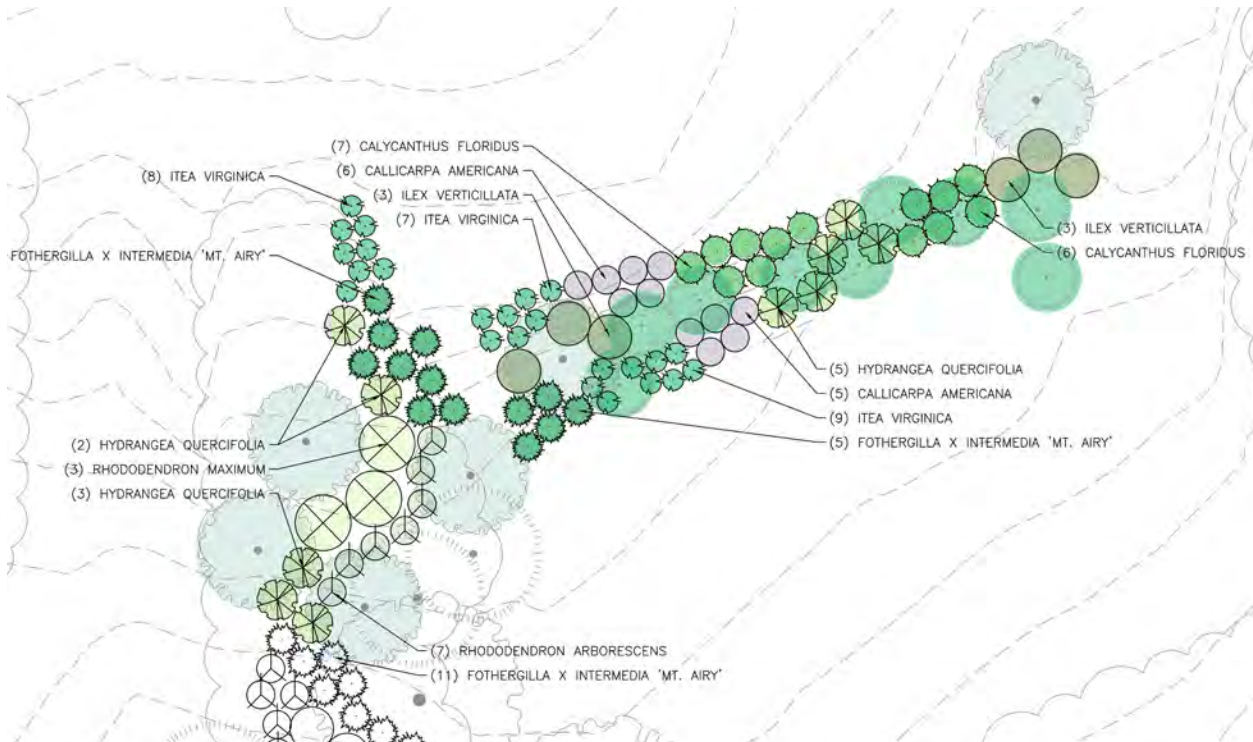
Currently water overflows the existing rain garden during large storm events. Remove built-up sediment and leaf litter. Excavate to increase ponding depth of rain garden and replace existing soil with amended soil mix to facilitate water infiltration. Install stone to aerate water and reduce water velocity. Install an overflow device for large rain events. The overflow device can either be an underdrain connected to an adjacent swale or a bioswale.



Concept for improving existing rain garden with stone-lined basin

Install Bioretention Facilities at Parking Areas

Parking areas should be designed with islands that function as bioswales to treat and convey stormwater runoff. Combined with porous pavement, curb cuts, and vegetated swales, the parking area bioswales are planted with vegetation to assist with the treatment and filtering of stormwater runoff as it is conveyed into another stormwater system, either a vegetated swale or closed pipe system.



Concept for parking lot planting island

SITE FURNISHING

SITE FURNISHING RECOMMENDATIONS

Site furnishings are important elements of the Folk School campus. They define campus character and improve the livability of outdoor spaces, providing a place to gather and socialize. Because of the nature of the Folk School, it is appropriate to use locally-made furnishings where possible. These will be eclectic and not standardized. They should, however, be durable, manufactured from non-toxic materials, and located to avoid conflicts with pedestrians or maintenance.

Other furnishings should be relatively standardized, matching each other in material, color, and craftsmanship. Developing a consistent furnishing palette enhances the campus's image and reduces ongoing maintenance costs.

BENCHES AND FIXED SEATING

Public seating areas invite collegial group activities. Individual benches along paths contribute to the comfort of visitors, offering a place to enjoy the natural setting.

It is recommended to provide seating throughout campus, particularly in following areas:

- Courtyards, plazas, and other areas where people frequently congregate;
- Near the entrances to buildings;
- Along pedestrian routes;
- Integrate fixed seating into hardscape areas, such as seat walls or retaining walls, where appropriate;

MOVABLE TABLES AND CHAIRS

The use of movable tables and chairs allow for dynamic seating arrangements that encourage active use of gathering spaces. Historic photographs of campus show that education often spilled out of doors to make use of shady spots on campus.

It is recommended that tables and chairs should be:

- Tables and chairs should be architecturally and aesthetically compatible with the desired campus appearance;
- Consider movable tables and chairs in areas accessible to different studios;
- Provide seating for small groups and individual use oriented to take advantage of interesting views and environments on campus.
- Movable furniture must be managed and supervised to identify damage or condition concerns.



OUTDOOR ROOMS AND PATIOS

Gathering spaces would allow an opportunity for education and socializing outdoors. The campus should feature a variety of outdoor gathering spaces distributed across campus near studio buildings and clusters of residential buildings.

Recommended areas include:

- Renovate Moulton Garden. Repair broken hardscape patio and walls; replace missing roof to shade structure; face retaining wall with stone and add a staircase to patio level;
- Renovate plaza between Keith House and Olive Dame Campbell Dining Hall, incorporating an accessibility ramp that meets ADA design requirements;
- Develop outdoor fire ring and patio with seating near Folk School Garden;
- Develop patio at entrance into Louise Pitman Fiber Arts Building;
- Develop patio at the upper entrance to Big Barn as part of its renovation.
- Develop gathering space on backside of Clay Spencer Blacksmith Shop.



BOLLARDS AND FENCES

Bollards and fences are generally used to create a barrier to define a pedestrian zone or restrict vehicular access. There is currently a wide variety of styles and construction methods on campus, many of which do not reflect the craftsman tradition of the school or its rustic setting. Refer to historic images for appropriate examples of fence types. Replace modern lumber or plastic bollards with simple rustic wood bollards.

TRASH AND RECYCLING RECEPTACLES

Trash and recycling containers are essential for a clean and sustainable campus environment. The placement and selection of a standardized receptacle will minimize the visual impact on campus.

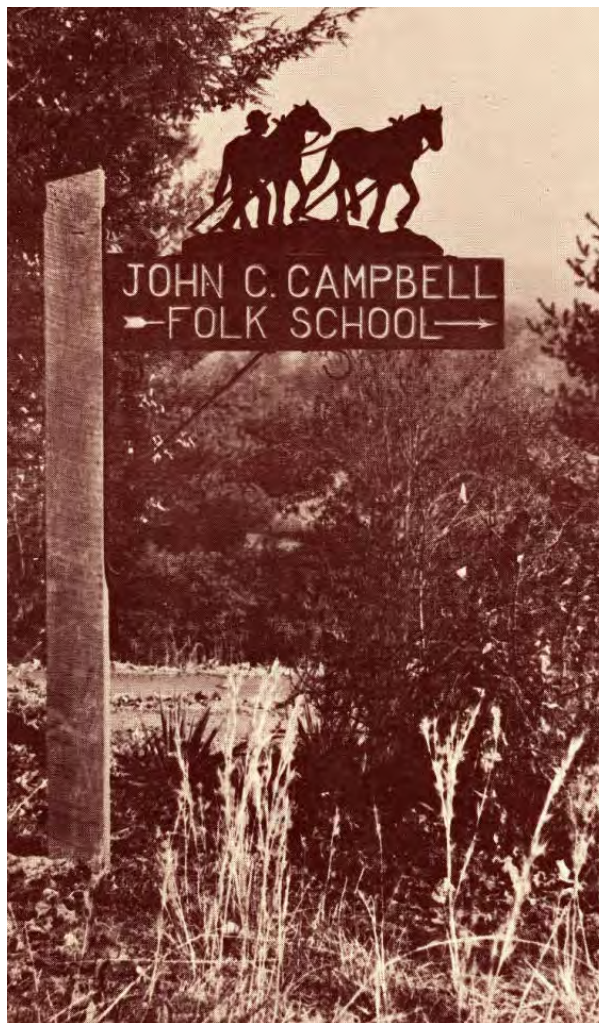
In general, receptacles should be:

- Located near high pedestrian traffic areas and near the entrances to major buildings;
- Located where easily accessible to maintenance staff;
- Clearly marked for their purpose;
- Selected to compliment and be compatible with other furnishings on campus in material and color. Black metal receptacles would be in keeping with other blacksmith fabricated small-scale features on campus.

SIGNAGE AND WAYFINDING

Signage provides important information for people on campus. Currently there is a wide diversity of campus signage types and styles. The campus would benefit from a standardized approach to sign design with a clear hierarchy and consistent appearance. The Folk School was undergoing a wayfinding study during the preparation of this report; however, general sign recommendations include:

- Organize signs into useful categories to establish a legible hierarchy;
 - Primary Entrance Sign. Use existing sign at Brasstown Road Bridge, currently being repaired. Install similar sign at south gateway to campus;
 - Road Signs. Vehicular directional signage would be slightly smaller and more simple than entrance sign. Install hand crafted metal and carved wood road signs mounted on simple locust wood posts;
 - Secondary Signs. Pedestrian directional signage and studio/building identification signage would be smaller than road signs, but incorporate similar construction and lettering of other signs.
- Standardize materials, colors, type, and style while reflecting the craftsman traditions of campus;
- Utilize combination of wrought iron and carved wood.



SITE LIGHTING

Effective lighting improves public safety and contributes to the night-time usability of campus. Lighting should be minimal, providing sufficient lighting to guide pedestrians while avoiding excessive brightness that detracts from the rural setting. Path lighting should be mostly low-level, downward-pointing lights or bollards. Pole lights should be used sparingly, but appropriate locations include in parking areas, at building entrances, and in courtyards/patios. General guidelines for campus lighting include:

- Provide sufficient lighting to create safe conditions for access and circulation;
- Walks and paths should provide sufficient light for wayfinding, but may need to be supplemented with flashlights distributed to students;
- Building entrances should be illuminated;
- Parking lots should be illuminated in accordance with “Dark Sky” design recommendations;
- Crosswalks should have additional illumination and employ secondary safety features described in the above section on pedestrian safety;
- Consider landscape lighting to enhance aesthetic qualities of campus, highlighting special features and trees.

CAMPUS ART AND CRAFTS

Locally-made site furnishings and artwork express the creative energy of the Folk School and should be used throughout campus. The Folk School should consider developing a policy on the acceptance of donated pieces for placement on campus to ensure they adhere to the desired campus aesthetic and maintenance capabilities.



Concept of path with downlights on simple, rustic bollards



Example of pole mounted, low voltage downlight (www.kichler.com)

LANDSCAPE

LANDSCAPE RECOMMENDATIONS

Landscape plantings serve to improve the appearance of the developed areas on campus, to provide a natural transition between developed and natural areas, and to enhance the biodiversity of the natural areas on campus. Well-designed landscape spaces should be included in future building programs to facilitate physical and visual connections between buildings and their surroundings.

In keeping with the historic landscape traditions on campus, landscape planting should feature native plants from the region. The use of native plants fosters a diverse and healthy ecosystem that showcases the diverse flora of Western North Carolina.

A list of recommended plants is included in the appendix to this report.

Landscape maintenance strategies should also include strategies for controlling invasive species. The Folk School should avoid planting any species that is listed on the USDA invasive species list: <https://plants.usda.gov/java/noxiousDriver>.

Landscape design should also integrate stormwater treatment management practices whenever feasible. Using green infrastructure to treat stormwater on site helps protect the water quality of the Brasstown River and its tributaries. Landscape-related stormwater treatment strategies include bioretention areas in parking lots, rain gardens and bioswales to manage and slow stormwater flow, and permeable paving to encourage infiltration.

General guidelines for plantings along streetscapes and building sites include:

- Native plants should be used where possible;
- Planting of trees and shrubs should reinforce wayfinding on campus, defining routes on campus and marking the entrances into buildings and paths;
- Provide accent plantings at key building entrances;
- At building entrances and foundations, utilize a simple palette of mass plantings of evergreens and ornamental shrubs to provide consistency across campus;
- Utilize native perennials and flowering trees and shrubs to create visual interest and focus areas where appropriate;
- Trees should be spaced on walking routes to provide shade to pedestrians;
- Consider planting trees near buildings to provide shade and reduce the visual scale of buildings to pedestrian level;
- Large manicured turf areas should be minimized and used only where appropriate to create a park-like environment or campus mall setting. In other areas, consider transitioning to native grass mixes or naturalized plantings to reduce maintenance requirements.

Sustainable landscape maintenance practices include:

- Be able to recognize native and invasive species;
- Determine the cause of dead or diseased plants, and if necessary, replace with more appropriate species;
- Allow herbaceous plants and grasses to overwinter, providing habitat for local wildlife; cut back in early spring;
- Mulch only where necessary and rely instead on native ground covers or dense plant communities;
- Mulch should not exceed two to three inches and never be placed in direct contact with plants;
- Prune only when necessary to remove hazards; prune ornamental shrubs after flowering to improve plant structure but not into formal, geometric shapes.

WOODLANDS AND NATURAL AREAS

Woodlands and natural areas on campus contribute to the overall setting and its ecological health. Woodlands include undeveloped areas within campus, including the wooded glade surrounding the Keith House and stretching over to the Folk School Garden. These areas provide an important link between the developed areas and the natural forests surrounding campus. The forested and riparian areas of campus provide habitat for a variety of wildlife. Canopy trees and plant communities along the streams and creeks on campus stabilize the flood zone and protect the water quality in adjacent water bodies. The large forested areas also contribute to protecting water quality, in particular in the areas along the southwestern edge of campus surrounding the aquifer which supplies the school's water.

It is recommended that the Folk School engage a certified conservation forestry profession to develop a forest management plan that aligns with its long-term goals.

General guidelines for management of the natural areas include:

- Regenerate the riparian edge by not mowing and allowing succession to occupy the flood zone;
- Supplement the riparian edge as necessary with native plants suited to the hydrologic conditions of the area;
- Control invasive species to allow a native plant community to develop; herbicides should only be applied by licensed operators in accordance with state and federal rules;
- Manage the woodland and forest areas for maximum health, thinning overcrowded stands to reduce potential for disease and insect outbreaks;
- Remove damaged, diseased, or exotic plants that inhibit the growth of desirable trees and shrubs. Removing infected trees, such as those killed by Pine Beetles, can reduce the spread of the insect or disease;
- Establish monitoring program to identify presence of invasive insects and diseases, including Woolly Adelgid, Emerald Ash Borer, and Cankers Disease.
- Continue monitoring hemlock trees for Woolly Adelgid. Consult with arborist to identify best control strategy, considering biological controls including predatory beetles, which have been used on campus in the past. Systemic insecticide can be used to defend against infestation of legacy trees or trees close to buildings or public areas.
- Replant new seedlings or protect natural seedlings in areas that open in the canopy from wind-throw or tree removal.

INVASIVE PLANT CONTROL

Invasive plant species degrade the overall ecological health of a native plant community. An integrated invasive plant maintenance regime is based upon being able to identify invasive species, understand their life cycle, and determining the proper control method. Observed invasive species include honeysuckle, privet, kudzu, and English ivy.

General guidelines for invasive plant control include:

- Do not plant invasive non-native plants on campus;
- Perform regular monitoring to identify invasive species;
- Take action early before invasive plants get well established;
- Determine appropriate control method based on species; typical controls include:
 - Manual pulling of weeds by the roots
 - Mechanical cutting timed to prevent reseeding
 - Biological controls like grazing animals to control larger areas
 - Chemical controls using herbicides when necessary and where appropriate

English Ivy (*Hedera helix*) is a common non-native landscape invasive that is seen on the Folk School campus. Control of noxious weeds like English ivy begins with preventing the species use in future planting designs. Additionally, improving the health of surrounding native plant communities

will slow the spread of weeds. However, once established it requires significant effort to eradicate. Recommended control methods include:

Mechanical control: Invasive vines should be cut and pulled down from trees and from the forest floor. English ivy and other weeds can be pulled up from their roots, but this will disturb the soil and may result in erosion unless the soil is stabilized.

Chemical control: herbicides offer an incomplete method of control of waxy-coated weeds like English ivy. Chemical control is best when combined with mechanical control. Treat stumps and cut vines with herbicide. Treat young shoots which have not developed waxy coating to leaves.



Ivy growing near Keith House

Typical Maintenance Tasks for Bioretention Features	
Frequency	Maintenance Task
Upon Establishment	<ul style="list-style-type: none"> During first 6 months after installation, inspect after storm events greater than 1/2" of rain. Perform any needed repairs or stabilization. Water plants as needed during establishment period. Remove and replace dead plants as needed.
At least 4 times a year	<ul style="list-style-type: none"> Mow grass swales and other bioretention areas with turf. Check inlets and outlets for accumulated debris, trash, soil deposits. Weed by hand as necessary.
2 times a year	<ul style="list-style-type: none"> Rake mulch
Annually	<ul style="list-style-type: none"> Cut back herbaceous plants in early spring (March-April) Supplement mulch to maintain 3 inch layer Prune shrubs only when needed. Remove sediment from outflow.
Every 3 years	<ul style="list-style-type: none"> Remove sediment from planting area, replace soil, replace mulch.
As needed	<ul style="list-style-type: none"> Divide plants and perennials. Add plants to maintain vegetation density. Remove dead, diseased, or invasive plants.

Typical Maintenance Tasks for Campus Landscape Areas	
Frequency	Maintenance Task
Upon Establishment	<ul style="list-style-type: none"> Water new plantings once every three days (first month), then weekly, during first growing season depending on rain fall. Replace dead plants as necessary (anticipate 10% plant mortality).
Monthly during first year	<ul style="list-style-type: none"> Remove weeds by hands.
Annually in March or April	<ul style="list-style-type: none"> Mow meadows and fields in early spring. Inspect planting beds for winter damage; replenish mulch as necessary. Cut back herbaceous perennials and remove dead growth. Divide established perennials and other plants to maintain proper spacing.
Annually in Fall	<ul style="list-style-type: none"> Add woody plants to maintain desired density.
Annually in Winter	<ul style="list-style-type: none"> Prune trees and shrubs to remove damaged limbs and hazards.
As needed	<ul style="list-style-type: none"> Remove invasive plants using species specific control methods. Remove dead and diseased plants. Stabilize bare areas or eroded areas

Typical Maintenance Tasks for Campus Woodland and Riparian Areas	
Frequency	Maintenance Task
As needed	<ul style="list-style-type: none"> Remove damaged limbs or trees if they present hazard to the public. Consult with an arborist to evaluate health of trees and determine best course of action.
Annually	<ul style="list-style-type: none"> Perform routine inspection of native hemlocks for Woolly Adelgid; contract with arborist for preventive treatment to resist infestation. Perform routine inspection of natural areas to identify invasive species populations. Maintain inventory of species and area; remove invasives using species specific control.
Every five years	<ul style="list-style-type: none"> Corrective pruning of mature trees to address structural or safety issues that will harm the long-term health of desirable tree. Woodland thinning to improve health of hemlock trees. Remove damaged hemlocks or trees with significantly less vigor than surrounding hemlocks to remove trees more susceptible to adelgid infestation. Woodland thinning to improve quality of hardwood stand. Remove poor quality trees that encroach upon more desirable species, including oak, white pine, and hemlock. Woodland regeneration to encourage high quality hardwood populations. Plant mix of native hardwood trees in existing gaps in forest, typically created by a tree fall or death. Preferred species include oaks, maple, beech, and birch.

UTILITIES

UTILITIES RECOMMENDATIONS

VISUAL CLUTTER

The campus suffers from visual clutter, very often related to utilities. The poor placement of HVAC and other utilities detract from the appearance of several buildings. Utility poles and power lines cut directly through campus, detracting from the rural setting. A combination of relocation and screening with vegetation will reduce the visual impact of these elements.

- Explore the opportunity to bury overhead utility lines where they cross interior open spaces near campus buildings and pedestrian routes;
- Relocate building utilities, like HVAC units and LP tanks, away from primary elevations and entrances to buildings;
- Employ vegetative screens or fencing to soften visual impact of features that cannot be relocated.



Concept for removing visual clutter

WATER

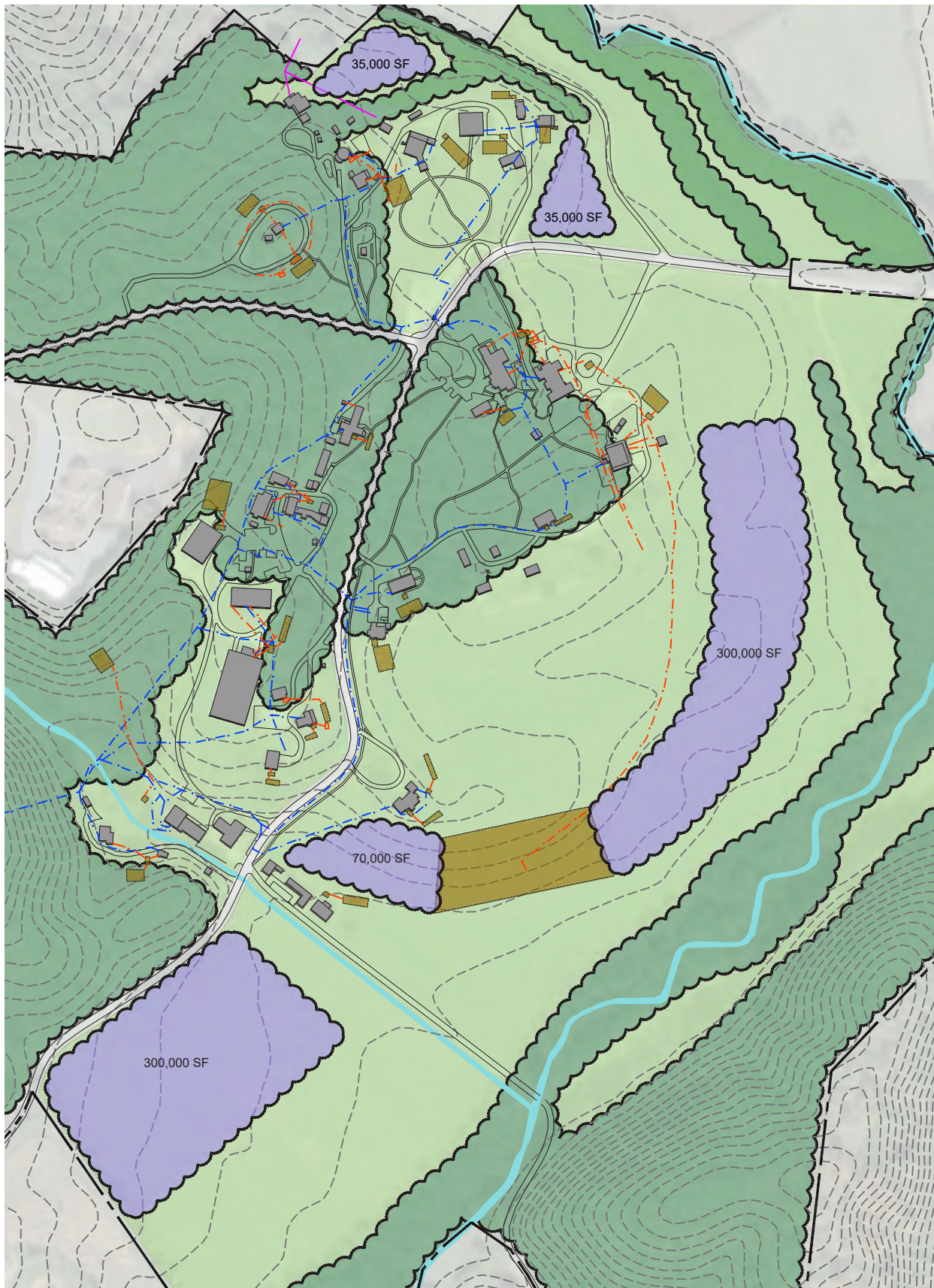
Water is a critical resource. Because the Folk School has its own water system, with two aquifer wells for domestic water, the quality of the water supply is an ongoing concern. The area around the wells and upstream from the wells should be protected from development.

The Folk School should also consider reducing consumption by metering individual buildings to trace water consumption; upgrade faucets, showers, and toilets to low use models; and utilize reclaimed water and recovered water for non-potable use like irrigation.

- Develop a standard for installing and utilizing cisterns to capture rainwater for non-potable use;
- Update water fixture standards to low-flow, water-saving models;
- Establish baseline for water consumption for different buildings and uses by installing water meters.

SOLAR ENERGY

The Folk School should consider strategies to improve energy efficiency for existing and proposed buildings. The reduction of energy consumption is a part of energy conservation. Transitioning to renewable energy sources, including wind and solar, should also be considered, but both require investing in relatively large scale systems to make it a viable energy source for the entire campus. Fortunately, North Carolina offers net metering for solar energy producers, allowing solar farms to sell energy to the utility companies, off-setting the costs of traditional power. Tax incentives also exist to assist in the installation of solar farms and a North Carolina law requires electric utilities to use some renewable energy. Developing a solar array in the open fields around campus can off-set utility bills. The downside to a large system would be the impact on the viewshed from campus. One alternative, possible because of the net-metering system in place in North Carolina, is to develop a solar array on the school-owned parcel at the intersection of Folk School Road and Waldroup Road, which would not be visible from campus.



XISTING SEPTIC TANK/FIELD
 XISTING SEPTIC LINE
 XISTING WATER LINE
 XISTING POWER LINE
 ROPOSED SEPTIC LOCATION OPTIONS

SEPTIC SYSTEMS

Wastewater is currently handled through a series of septic systems because the campus is not connected to the Town of Murphy's sewer system. The closest sewer connection to the municipal system is located approximately one mile away near the Tri-County Early College High School at the intersection of Highway 64 and McCombs Road. Most of the septic fields serve multiple buildings, but septic fields are generally located in close proximity to the buildings they service. One exception is a new, large septic field located below the Orchard House that services Keith House, Olive Dame Campbell Dining Hall, and Davidson Hall.

According to our calculations, based on facility use, the design flow for the entire campus after implementation of the recommendations of this master plan is 16,180 gpd. Additional studies will be required to confirm design flow and confirm soil conditions.

Three options exist to handle future septic needs:

1. Develop a consolidated 20,000 gpd septic system in a single location. This will require approximately 300,000 sf. There is space in the open field below Davidson Hall and Orchard House to accommodate this size field. Past soil tests have shown adequate percolation for septic; however, the soil will need to be tested as part of the design process. An alternative location would be on the western end of the open field south of Folk School Road. There is sufficient space and the soils, based on soil maps, are classified as being suitable for septic fields; this would need to be confirmed. A consolidated system requires the addition of pumps to transport the wastewater to the field site.
2. An alternative to a traditional field system would be to integrate a wastewater irrigation system. These require additional equipment and expense, but reduce the amount of drain field required. Wastewater irrigation systems still require pretreatment facilities, similar to traditional septic tanks that "filter" wastewater, but the effluent is then sprayed onto a field where it soaks into the soil.
3. Smaller septic fields can be developed in available land close to the first phase of development, while a larger, consolidated field option is studied. Percolation tests will confirm if adjacent open land is suitable, but available land exists below the Orchard House, north of the Cottage, and in the open field north of Rockhouse Road.

DESIGN GUIDELINES

ARCHITECTURE DESIGN GUIDELINES

The purpose of these design guidelines is to provide direction for character, massing, and spatial relationship of future buildings on the Folk School campus. These are intended to aid in the preservation of the historic character of the built environment and the cultural landscapes that contribute to the learning environment and the unique beauty of the campus. These guidelines are presented in such a way to provide room for creativity and interpretation for future design while remaining true to the traditions and architectural context of the Folk School. Interpretations of historic forms and styles are acceptable as long as they are responsive to and distinguishable from the historic buildings.

These design guidelines also recognize that the different areas of campus have distinctive architectural characteristics.

North Campus

North campus includes the campground, residential buildings, and studios organized generally around an open interior space and overlooking Brasstown Road towards open fields and the mountains in the distance. There is much variation in building styles. Future placement of buildings should reinforce the edges of the interior open space as the organizing landscape feature of this area.

Campus Core

Campus core is the geographic heart of the campus and includes Keith House, the current Olive Dame Campbell Dining Hall, studios, residential buildings, and the Folk School Garden. It overlooks the main entry road off Brasstown Road, the open fields, and Brasstown Creek. The tone of the architectural style and building placement is set by Keith House, but includes various new architectural styles introduced by later buildings. Future additions to this area should replicate the orientation of the existing buildings. Buildings should be set on the woods' edge, and compliment but not necessarily mimic the Keith House in massing and style.

Studio Row

Studio Row is defined by smaller studio buildings clustered together in a linear arrangement to create the feeling of a mountain village. It includes a looser collection of residential buildings on its southern end and two larger buildings—the festival barn and the maintenance and housekeeping complex. The design of future buildings should respond to the existing massing and orientation of the existing studios, reinforcing the village street arrangement.

South Campus

South Campus has a unique architectural tone set by several unique historic structures, including the blacksmith shop and Big Barn. The surrounding topography and road network contributed to the historic development pattern in this area, resulting in a linear arrangement of buildings and creating a feeling of a village crossroads. Future buildings should strive to create a southern gateway into campus and complement the European-inspired character of the historic buildings.

BUILDING ORIENTATION

Proposed buildings should consider solar orientation and microclimatic factors, such as wind direction, to determine building location and placement of entrances and windows. Buildings should be oriented to take advantage of shade and breezes in summer and passive solar energy and wind protection in the winter.

Building orientation should also consider the building's landscape context, including its relationship with primary open spaces and future development on or adjacent to the site.

Buildings should be situated on its site in a manner similar to the historic buildings in the area. Every area on campus has its unique character, which should be reflected in future building campaigns. Building orientation should strive to create a more cohesive relationship between existing and proposed buildings.

- Buildings in North Campus should be oriented facing the interior opens space with porches and entrances allowing access to the interior landscape;
- Buildings in Campus Core should be sited along the edge of the woods oriented towards the open fields and distant vistas;
- Buildings in Studio Row should be oriented along the interior road or clustered to create "pods" with shared outdoor spaces;
- Buildings in South Campus should follow the grade and be oriented either in relation to the creek or the adjacent roads.

BUILDING RELATIONSHIP WITH EXTERIOR LANDSCAPE

Proposed buildings should consider adjacent landforms and topography when developing floor elevations, building proportions, location of entrances, and gravity-fed septic systems. Multi-level buildings should be designed to provide direct access on both levels where feasible. Using the topography, entries into both levels helps to meet accessibility goals for the campus.

Future buildings should be designed to facilitate a positive relationship with adjacent exterior spaces. Ground floor spaces should provide a direct visual connection to the outdoors and provide multiple entry/exit points to activate spaces around building. Incorporate exterior circulation features and gathering spaces, including patios. Porches and arcades at entrances will shade interior spaces and provide an outdoor gathering space.

BUILDING MASSING, FORM, AND ARTICULATION

Several proposed buildings are larger than many of the historic buildings on campus, reflecting a need to develop a compact, walkable campus with facilities that will accommodate future growth. It important to design buildings that are sensitive to the scale of existing buildings. This can be accomplished with thoughtful articulation of materials that are of traditional dimensions and the inclusion of features to reduce a building's overall scale.

Building forms should be similar to the historic buildings in the adjacent area:

- Simple rectangular forms are typically appropriate;
- Historic buildings are typically one to two stories tall;
- Historic buildings characteristically include front porches, variations in wall planes, and complex roof forms and profiles;
- For multi-story buildings, include smaller scale elements on front facade, including shed-roofed porches and arcades, to provide a human scale;
- New buildings should appear similar in width to nearby historic buildings; facades of larger buildings can be subdivided into subordinate planes that are similar to nearby buildings;
- Minimize blank walls and provide ample fenestration in keeping with historic precedence.

Roof forms should be similar to the historic buildings on campus:

- Open gable/cross gable and hip roofs are characteristic and appropriate roof forms for buildings;
- Include shed and gabled dormers;
- Roof pitches are relatively steep except for the studio buildings in Studio Row.

Use solid-to-void (wall to window/door) ratio similar to that seen traditionally:

- Historic buildings typically have asymmetrical facades;

- Use window opens similar in size and orientation as in historic buildings; these are typically oriented vertically, multi-pane, and double hung;
- Large surfaces of glass are usually inappropriate; it is preferred to have banks of individual windows, especially in studio buildings.

BUILDING MATERIALS AND COLOR PALETTE

The selection of materials should reflect the architectural traditions exhibited in historic buildings on campus and project a sense of permanence and quality on campus. Consider life-cycle maintenance costs and energy conservation when selecting potential building materials. Select a color palette that is harmonious with existing Folk School buildings.

New materials should be similar in character to traditional building materials:

- Utilize combination of uncoursed stone masonry and wooden clapboard; masonry is typically restricted to first story facades;
- Utilize stone masonry for both exterior and interior chimneys;
- Windows and doors should have wooden reveals, with depth and trim consistent with historic buildings;
- Ornamental features like brackets are not characteristic of historic buildings; exposed rafter tails should appear as functional features rather than decorative.

CIRCULATION INFRASTRUCTURE DESIGN GUIDELINES

The goal is to provide a safe and efficient transportation network of roads, walkways, and paths on campus. Development of new circulation features should strive to minimize impervious surfaces and minimize the disruption of natural areas. Accessible spaces, passenger loading zones, and driveway aprons may be concrete or asphalt. Most of the roads and parking lots can be constructed by layering multiple sizes of gravel with an edge restraint to prevent gravel migration. In travel lanes or sloped areas, it is recommended to incorporate a modular plastic grid to prevent rutting and compaction.

VEHICULAR CIRCULATION

- Use existing infrastructure when possible; which increases site efficiency and reduces the disruption associated with building new infrastructure;
- Minimize pavement widths; low speed internal roads should be designed at the minimum appropriate width (the standard is 18 feet for two-way traffic);
- Minimize impervious surfaces; use gravel for most parking areas and roads; in areas susceptible to erosion or intended to be accessible routes, consider the use of porous pavement or permeable pavers;
- Use double loaded parking lots to maximize efficiency;
- Consolidate vehicular and pedestrian routes where feasible to prevent need to build additional infrastructure.

MATERIAL CONSIDERATIONS FOR VEHICULAR PAVEMENT INCLUDE:

Interlocking Grid Porous Pavement Systems

Grid reinforced parking pavements are appropriate for sloped areas and heavy traffic areas like travel lanes in parking lots or delivery truck areas. Truegrid, EZ-Roll Paver, or GravelPave are relatively similar products that contain plastic cellular grids or rolls which are set on a prepared base and filled with either stone of 3/4" diameter or smaller, angular stone. These pervious systems are relatively easy to install and cost between \$6 and \$8 per square foot. They do not require a highly skilled and specialized contractor. Because they are composed of small modular pieces or rolls, they have versatility for different uses, including pedestrian walkways, inconspicuous emergency vehicle access routes, parking, and drives.

Fill material can be locally quarried. Nantahala Talc and Limestone is local and the oldest operating quarry in NC. An alternate local supply for crushed granite is The North Carolina Granite Corp. Pea gravel or similar smooth, rounded stone is not recommended for these systems, as it migrates easily and does not compact as effectively in the cells.

Exposed Aggregate Concrete

This is a specialty concrete mixture that contains a selected stone (often pea gravel) entrained within the concrete, adding visual appeal and texture. This can be used for vehicular or pedestrian use, though specifications may vary depending on intended use.

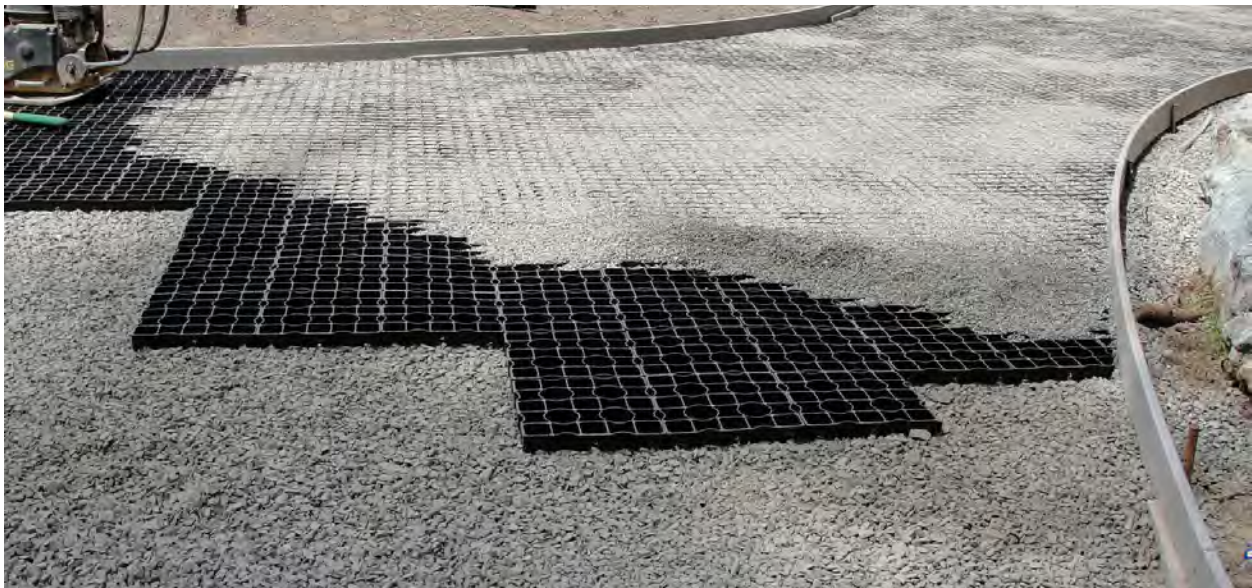
This material is low maintenance, long lasting, and durable. The typical cost is between \$9 and \$11 per square foot. Curb and gutter can be installed as part of paving installation or curb and gutter can be independently done with alternate finishes. A mix composed of 3/8" pea gravel exposed aggregate would reflect a similar coloring (browns, tans, earth tones) to the existing stonework of some buildings and flagstone paved areas on campus.

Pervious Concrete

Pervious concrete is a specialty concrete mixture with void spaces that allows water to pass through the surface. This can be used for vehicular or pedestrian use.

Pervious concrete has an appealing visual and tactile coarse texture, which contrasts from traditional concrete finishes. It costs approximately \$12 a square foot. It is subject to spalling (surface course wearing off into gravel) when placed under heavy vehicular use, specifically where slow vehicular turning movements are made.

Its effectiveness related to stormwater infiltration depends on both the pavement design as well as the ability to limit dirt and debris from clogging it. It is not intended to manage surface runoff directed from other areas.



Gravel paving in reinforced interlocking grid

APPENDIX: RECOMMENDED PLANT LIST

See following page for plant list; see below for plant list key

PLANT LIST KEY

RECOMMENDED USES			
Level of Use	P=Plant New Tree & Conserve Existing Trees C=Conserve Existing Tree L=For Limited Planting or Conservation		
Landscape Areas	0	Tree to Avoid, Not Suitable	
	Blank	May or May Not be Suitable	
	X	Good Choice	
	XX	Excellent Choice	
ENVIRONMENTAL CHARACTERISTICS/TOLERANCES			
Average Life	S	Short	less than 25 yrs
	M	Moderate	25-40 years
	X	Long	50 years or greater
Soil Moisture	H	hydric - wet; floods occasionally	
	M	mesic-moist; mod to well drained	
	X	xeric-dry; very well drained	
Growth Rate	S	Slow .5 to 1.5 feet per year	
	M	Moderate 1.5 to 2.5 feet per year	
	F	Fast 2.5 to 3 feet per year	

PLANT LIST KEYS	
RECOMMENDED USES	
Level of Use	<p>■ Plant New Tree & Conserve Existing Trees</p> <p>■ Conserve Existing Trees</p> <p>■ Limited Planting for Conservation</p>
Landscape Areas	<p>0 Tree to Avoid, Not Suitable</p> <p>Blank X May or May Not be Suitable</p> <p>XX Good Choice</p> <p>Excellent Choice</p>
ENVIRONMENTAL CHARACTERISTICS/TOLERANCES	
Average Life	<p>H Short less than 25 yrs</p> <p>M Moderate 25-40 years</p> <p>X Long 50 years or greater</p>
Soil Moisture	<p>H hydric - wet; floods occasionally</p> <p>M mesic-moist; moist to well drained</p> <p>X xeric-dry; very well drained</p>
Growth Rate	<p>S Slow 1.5 to 1.5 feet per year</p> <p>M Moderate 1.5 to 2.5 feet per year</p> <p>F Fast 2.5 to 3 feet per year</p>

Height	Spacing
HEIGHT	SPACING - REGULAR

LEVEL OF USE
ROAD FRONTAGE - R.O.W.
PARKING LOTS
PLAZAS AND FACADE PLANTINGS
BUFFER PLANTINGS
VEGETATIVE SCREENING
RIPARIAN / DRAINAGE AREAS
CONSERVATION & NATURAL AREAS
UTILITY CORRIDORS

SOIL MOISTURE
GROWTH RATE
AVERAGE LIFE SPAN

<i>Carya glabra</i>	Pignut Hickory	50'-80'	35'-50'
<i>Carya illinoensis</i>	Pecan	75'-100'	35'-50'
<i>Carya tomentosa</i>	Mockernut Hickory	60'-80'	35'-50'
<i>Celtis occidentalis</i>	Common Hackberry	40'-60'	35'-50'
<i>Celtis tenuifolia</i>	Georgia Hackberry	20'-30'	35'-50'
<i>Fagus grandifolia</i>	American Beech	50'-80'	35'-50'
<i>Fraxinus pensylvanica</i>	Green Ash	50'-70'	35'-50'
<i>Fraxinus americana</i>	White Ash	80'	35'-50'
<i>Juglans nigra</i>	Black Walnut	50'-75'	35'-50'
<i>Liquidambar styraciflua</i>	Sweetgum	60'-80'	35'-50'
<i>Liriodendron tulipifera</i>	Tulip Poplar	70'-90'	35'-50'
<i>Magnolia acuminata</i>	Cucumber Magnolia	60'-75'	35'-50'
<i>Platanus occidentalis</i>	Sycamore	75'-100'	35'-50'
<i>Quercus alba</i>	White Oak	65'-85'	35'-50'
<i>Quercus coccinea</i>	Scarlet Oak	70'	35'-50'
<i>Quercus falcata</i>	Southern Red Oak	60'-90'	35'-50'
<i>Quercus laurifolia</i>	Laurel Oak	40'-60'	35'-50'
<i>Quercus lyrata</i>	Overcup Oak	40'-60'	35'-50'
<i>Quercus michauxii</i>	Swamp Chestnut Oak	40'-60'	35'-50'
<i>Quercus nigra</i>	Water Oak	50'-100'	35'-50'
<i>Quercus nuttalli</i>	Nuttall Oak	75'	35'-50'
<i>Quercus palustris</i>	Pin Oak	60'	35'-50'
<i>Quercus phellos</i>	Willow Oak	40'-75'	35'-50'
<i>Quercus rubra</i>	Northern Red Oak	50'-75'	35'-50'
<i>Quercus stellata</i>	Post Oak	35'-50'	35'-50'
<i>Tilia americana</i>	American Basswood	60'-120'	35'-50'
<i>Ulmus alata</i>	Winged Elm	40'-70'	35'-50'
<i>Ulmus americana</i>	American Elm	60'-80'	35'-50'

C	0	0	0				x	
C	0	0	0	0			x	
C	0	0	0				x	
C						x	x	
C						x	x	
P				0		x	x	
P	x		x			x	x	
P	x		x			x	x	
C	0	0	0			x	x	
P	0	0	0			0	x	
P						XX		0
P		0				x	x	
P						x	x	0
P	x						x	
P	XX	x	x				x	
P	x					x	x	
P	x						x	
P	XX					x	x	
P	0	0	0			x		
P	x					XX		0
P	x						x	
L	x	0	0					0
P	XX	XX	XX	0		XX	x	0
P	x						x	
P	x						x	
C						x		
C	XX			0		0	x	
C						x		

M	S	L
M	S	M
X	S	L
M	S	M
X	S	M
M	S	L
H	F	M
M	M	M
M	M	L
M	F	L
M	M	L
M	F	M
M	F	M
M	S	L
X	M	L
M	M	L
M	F	M
H	M	L
M	M	L
M	F	M
M	M	L
M	M	M
M	F	L
M	F	L
X	M	L
M	F	M
M	M	M
M	M	M

Acer rubrum	Red Maple	40'-70'	25'-40'
Acer barbatum	Southern Sugar Maple	20'-70'	25'-40'
Acer saccharum	Sugar Maple	40'-80'	25'-40'
Acer saccharum 'Green Mountain'	'Green Mountain' Sugar Maple	40'-60'	25'-40'
Acer saccharum 'Legacy'	'Legacy' Sugar Maple	60'	25'-40'
Betula nigra	River Birch	40'-70'	25'-40'
Betula nigra 'Heritage'	River Birch 'Heritage'	40'-50'	25'-40'
Carpinus caroliniana	Ironwood	20'-35'	25'-40'
Diospyros virginiana	Common Persimmon	35'-60'	25'-40'
Halesia carolina	Carolina Silverbell	30'-40'	25'-40'
Magnolia virginiana	Sweetbay Magnolia	30'-50'	25'-40'
Nyssa sylvatica	Blackgum	30'-50'	25'-40'
Oxydendrum arboreum	Sourwood	30'	25'-40'
Ostrya virginiana	Hophornbeam	25'-40'	25'-40'
Prunus serotina	Black Cherry	50'-80'	25'-40'
Salix nigra	Black Willow	30'-60'	25'-40'
Sassafras albidum	Sassafras	30'-60'	25'-40'

P	XX	XX	XX	XX		XX	x	0
P	x	x	XX	XX		x	x	
P	XX					x		0
P	XX							0
P	XX							0
P	x	x	XX	XX		XX	x	0
P	x	x	XX	XX		XX		0
P	XX	x	XX	XX		XX	x	
P	0	0	0			x	x	
P	x					x		
P				XX		XX		
P	x					x	x	
P							x	
P		x				x	x	
C						x	x	
C	0	0	0			x	x	0
P				x		x	x	

M	F	L
M	M	M
M	M	L
M	F	L
M	F	L
M	F	M
M	F	M
M	S	M
M	M	S
M	M	M
W	F	M
M	S	M
M	M	S
M	S	M
M	M	M
W	F	S
M	M	M

Acer leucoderme	Chalk Maple	25'-30'	20'-30'
Amelanchier arborea	Serviceberry	15'-25'	20'-30'
Cercis canadensis	Redbud	20'-30'	20'-30'
Chionanthus virginicus	Fringetree	12'-20'	20'-30'
Cornus florida	Flowering Dogwood	15'-30'	20'-30'
Cornus florida var. rubra	Pink Flowering Dogwood	15'-30'	20'-30'
Cornus stricta	Swamp Dogwood	10'-15'	20'-30'
Crataegus phaenopyrum	Washington Hawthorne	20'-35'	20'-30'
Hamamelis virginiana	Common Witchhazel	15'-20'	20'-30'

P	x	x		x			x
P	XX		XX	XX		x	x
P	XX		XX	XX		x	XX
P	x			x			x
P	XX	0	0	XX		x	XX
P	XX	0	0	XX			x
C						x	x
P	x		x				x
P			x			x	x

M	M	M
M	S	M
M	F	S
M	M	S
M	M	M
M	M	M
H	S	S
M	S	S
M	M	M

MASTER PLANT LIST

PLANT LIST KEY	
RECOMMENDED USES	
Level of Use	P-Plant New Tree & Conserve Existing Trees C-Conserve Existing Tree L-For Limited Planting or Conservation
Landscape Areas	0 Tree to Avoid, Not Suitable Blank May or May Not be Suitable X Good Choice XX Excellent Choice
ENVIRONMENTAL CHARACTERISTICS/TOLERANCES	
Average Life	S Short less than 25 yrs M Moderate 25-40 years X Long 50 years or greater
Soil Moisture	H hydric - wet, floods occasionally M mesic-moist, mod to well drained X xeric-dry, very well drained
Growth Rate	S Slow 5 to 1.5 feet per year M Moderate 1.5 to 2.5 feet per year F Fast 2.5 to 3 feet per year

Height	Spacing
HEIGHT	SPACING - REGULAR

RECOMMENDED USES FOR LANDSCAPE AREAS									
LEVEL OF USE	ROAD FRONTAGE - R.O.W.	PARKING LOTS	PLAZAS AND FAÇADE PLANTINGS	BUFFER PLANTINGS	VEGETATIVE SCREENING	RIPARIAN / DRAINAGE AREAS	CONSERVATION & NATURAL AREAS	UTILITY CORRIDORS	

ENVIRONMENTAL CHARACTERISTICS AND TOLERANCES		
SOIL MOISTURE	GROWTH RATE	AVERAGE LIFE SPAN

Trees: Evergreen

Ilex opaca	American Holly	40'-50'	20'-30'
Ilex vomitoria	Yaupon Holly	10'-20'	10'-15'
Juniperus virginiana	Eastern Red Cedar	30'-40'	20'-30'
Magnolia grandifolia	Southern Magnolia	50'-90'	25'-40'
Pinus strobus	Eastern White Pine	50'-80'	25'-40'
Pinus taeda	Loblolly Pine	60'	25'-40'
Pinus virginiana	Virginia Pine	15'-40'	25'-40'
Prunus caroliniana	Carolina Cherrylaurel	15'-35'	25'-40'
Thuja occidentalis 'Emerald'	Arborvitae Emerald	12'-15'	5'-10'
Tsuga canadensis	Hemlock	40'-70'	20'-30'

P		x		XX			x	0
P	x	x	x					x
P				XX	XX		x	
P		0		XX	x			0
P	x	XX		XX		x	x	0
P	x	XX		XX		x	x	0
P	0	0	0	XX	x	0	x	
P	0	0	0	XX	x	0	x	
P	0	0	0	XX	x	0	x	

M	S	L
M	F	S
X	S	L
M	M	L
M	F	M
M	F	M
M	F	S
M	M	M
M	F	M
M	M	X

Shrubs: Deciduous

Aesculus parviflora	Bottlebrush Buckeye	6'-12'	10'-15'
Aesculus sylvatica	Painted Buckeye	10'-12'	7'-10'
Alnus serrulata	Tag Alder	15'-25'	10'-15'
Aronia arbutifolia	Red Chokeberry	6'-12'	5'-8'
Callicarpa americana	American Beautyberry	3'-5'	5'-8'
Calycanthus floridus	Sweetshrub	6'-12'	5'-8'
Cephalanthus occidentalis	Buttonbush	6'-12'	5'-8'
Clethra alnifolia	Summersweet	4'-8'	5'-8'
Cornus amomum	Silky Dogwood	6'-10'	5'-8'
Euonymus americanus	Strawberry Bush	6'	10'-15'
Fothergilla gardenii	Dwarf Bottlebrush	3'	5'-8'
Hydrangea arborescens	Hydrangea	3'-5'	10'-15'
Hydrangea quercifolia	Oakleaf Hydrangea	6'-8'	5'-10'
Ilex decidua	Possumhaw	20'-30'	5'-10'
Ilex verticillata	Winterberry	3'-12'	5'-8'
Itea virginica	Virginia Sweetpire	3'-4'	5'-8'
Prunus angustifolia	Chickasaw Plum	6'-12'	10'-15'
Rhododendron calendulaceum	Flame Azalea	6'-12'	7'-12'
Rhododendron canadense	Piedmont Azalea	6'-15'	7'-10'
Rhododendron periclymenoides	Pinxterbloom Azalea	2'-6'	7'-10'
Rhododendron prunifolium	Plumleaf Azalea	8'-10'	7'-10'
Rhus aromatica	Aromatic Sumac	6'-12'	10'-15'
Rhus copallina	Winged Sumac	20'-35'	10'-15'
Rhus typhina	Staghorn Sumac	15'-30'	10'-15'
Sambucus canadensis	Elderberry	5'-12'	10'-15'
Vaccinium arboreum	Sparkleberry	6'-20'	10'-15'
Viburnum acerifolium	Mapleleaf Viburnum	3'-6'	5'-8'
Viburnum prunifolium	Blackhaw Viburnum	12'-15'	5'-8'

P	x	0	0	XX		x	x	x
P				x		x	x	x
P	x			x	XX	x	x	
P	x	x		XX				x
P	x			XX			x	x
P	x		x	x		XX		
P				x		x	x	x
P	x	XX	XX					XX
P					x	XX		
P		0						
P	XX	XX	XX					x
P				x			x	
P	XX	x		XX				XX
P				x		x	x	x
P	x			x		x		x
P		XX	XX					x
P	0			x				x
P	x	0		x			x	x
P	x	0		x			x	x
P	x	0		x			x	x
P		0	x	x		x	x	
P	x			x			x	XX
P	XX	x		x			x	x
P			x			x	x	x
P	x			x		x	x	x
P	x			x				
P				x				
P			x			x	x	x

M	M	S
M	M	S
H	F	S
M	S	S
M	F	S
M	M	S
H	M	S
M	M	S
M	M	S
H	S	S
M	M	S
M	M	S
H	S	M
M	S	M
M	S	M
M	S	M
M	M	S
X	M	S
M	M	S
X	S	L
X	M	S
M	M	M

Shrubs: Evergreen

Ilex glabra	Inkberry	5'-8'	5'-8'
Ilex vomitoria 'Nana'	Dwarf Yaupon Holly	2'	5'-8'
Illicium floridanum	Florida Anise	10'-12'	10'-15'
Illicium parviflorum	Small Anise-tree	10'-15'	10'-15'
Kalmia latifolia	Mountain Laurel	12'-20'	5'-10'
Leucothoe axillaris	Doghobble	2'-4'	10'-15'
Myrica cerifera	Wax Myrtle	15'-20'	10'-15'
Osmanthus americanus	Devilwood	15'-25'	10'-15'
Rhododendron maximum	Rosebay Rhododendron	5'-15'	7'-10'

P	x	x	x	XX	XX		x	x
P	x	x	x		x			x
P				x	x	XX	x	
P	x	x	x	XX	XX	x	x	
P		0	x	x	x		x	x
P		0	x			x	x	
P		x		x		0		x
P								
P	x	0		x			x	x

X	M	S
X	S	S
H	M	S
M		
M	S	S
H	S	S
M		
M	M	M
M	S	M

Perennials/Groundcovers

Asclepias tuberosa	Butterfly Weed	1'-2.5'	1'-1.5'
Aquilegia canadensis	Wild Columbine	2'-3'	1'-1.5'
Echinacea purpurea	Purple Coneflower	2'-5'	1.5'-2'
Geranium maculatum	Wild Geranium	1.5'-2'	1'-1.5'
Iris crestata	Dwarf Crested Iris	6"-9"	1'
Iris virginica	Southern Blue Flag Iris	1'-3'	1'-3'
Maianthemum racemoseum	False Solomon's Seal	2'-3'	1.5'-2'
Sanguinaria canadensis	Bloodroot	6"-9"	3"-6"
Onoclea struthiopteris	Ostrich Fern	3'-6'	5'-8'
Osmundastrum cinnamomeum	Cinnamon Fern	2'-3'	2'-3'
Polygonatum biflorum	Solomon's Seal	2'-3'	1'-1.5'
Phlox divaricata	Wild Blue Phlox	9"-12"	1'
Phlox stolonifera	Creeping Phlox	3"-6"	1'-2'
Podophyllum peltatum	May Apple	1'-1.5'	1'
Polystichum acrostichoides	Christmas Fern	1'-2'	1'-2'
Rudbeckia hirta	Black-Eyed Susan	1'-2'	1'-2'

P	x							x
P							x	
P	x		x				x	x
P	x					x	x	x
P	x					x	x	x
P	x		x			x	x	x
P						x	x	
P						x	x	
P						x	x	
P						x	x	
P						x	x	
P	x		x			x	x	x
P						x	x	
P						x		
P	x	x	x			x	x	x

M	M	X
M	F	S
M	F	S
M	F	S
M	F	S
H	F	S
M	M	S
M	F	S
H	F	S
H	F	S
M	S	S
M	S	S
M	S	S
M	F	S
M	F	S



wla
STUDIO

