

Stone Mountain State Park General Management Plan



North Carolina Department of Natural and Cultural Resources

Division of Parks and Recreation

Mountain Region

FEBRUARY 2017

I. MISSION AND PURPOSE

MISSION STATEMENT:

Conservation: To protect natural diversity of North Carolina through careful selection and stewardship of state parks system lands;

Recreation: To provide and promote outdoor recreation opportunities in the state parks system and throughout the state; and

Education: To encourage appreciation of North Carolina's natural and cultural heritage through diverse educational opportunities; for all citizens of and visitors to the State of North Carolina.

Our purpose: The State of North Carolina offers unique archaeological, geologic, biologic, scenic and recreational resources. These resources are part of the heritage of the people of this State. The heritage of a people should be preserved and managed by those people for their use and for the use of their visitors and descendants.

PARK PURPOSE:

The park serves residents of North Carolina and visitors by protecting the natural character, wildlife and natural communities within the park. The park provides facilities for viewing and enjoying the major scenic values of the area and opportunities for appropriate outdoor recreational use. There are also interpretive and environmental programs that educate park visitors on plant and animal life, geology, ecology, and the cultural history of the area.

Among the significant geologic features is Stone Mountain, an exfoliation granitic dome rising 600 feet above the valley floor. It is the largest plutonic monadnock in the state. The light gray, medium-grained granodiorite forming the mountain developed from magma several miles deep in the earth about 390 million years ago. As the magma moved upwards, it intruded into the older surrounding rocks and solidified underground into a large mass of intrusive igneous rock known as a pluton. It took millions of years of erosion to remove the overlying rock and expose sections of the pluton at the surface of the earth. Wolf Rock and Cedar Rock within the park are part of this same pluton and, therefore, similar in structure to Stone Mountain. As large sections of exposed granodiorite weather, thin curved sheets fall off, or exfoliate, and the rock unit takes on a domed appearance resembling a peeling onion. The proximity of three exfoliation domes: Stone Mountain, Wolf Rock and Cedar Rock to the Blue Ridge escarpment is of unusual geologic interest. As a result, Stone Mountain was designated as a National Natural Landmark in 1974.

The topography and micro relief, combined with substrates ranging from bare rock to fairly well-developed soil, support significant and diverse biologic values within the park. Natural communities include Acidic Cove Forest, Pine-Oak Heath, Chestnut Oak Forest, Dry-Mesic Oak-Hickory Forest, Low Elevation Rocky Summit, and Low Elevation Granitic Dome. Wolf-Cedar Rock Natural Area features extensive development of outcrop communities that are excellent illustrations of the successional sequence in the various stages of rock colonization, from lichen to moss to herb to shrub to forest communities. Thirteen rare plant and animal species, including two

endangered species, have been reported in or near the park. The park also protects over 200 species of vascular plants. A majority of the park is designated as a Dedicated Nature Preserve, so the historical establishment of Registered Natural Heritage Areas has been replaced by the Dedicated Nature Preserve (DNP).

In addition to the significant scenic values of Stone Mountain, Wolf, and Cedar Rocks, the park includes four major waterfalls: Stone Mountain Falls, 200 feet in height; Middle Falls, a series of low cascades; Lower Falls, 25 feet in height; and Widow's Creek Falls. The northwestern vistas, a panoramic look at the Blue Ridge escarpment, are the most scenic in the park. The most extensive vistas can be best viewed from Wolf Rock. Miles of cascading streams within the park add to the beauty of its exceptional mountain scenery.

Stone Mountain State Park has excellent water quality throughout the watershed. Harris Creek, Garden Creek, and Big Sandy Creek are all designated as High Quality Waters. Widow's Creek, Bullhead Creek, Rich Mountain Creek, and Horse Cove Branch are all designated as Outstanding Resource Waters, which is the highest water quality designation in North Carolina.

The park offers extensive wilderness back-country experiences. Stone Mountain is also known for its premier rock-climbing opportunities. Other recreational opportunities within the park include hiking, camping, fishing, nature study and picnicing.

Significant cultural resources include historic structures such as home sites, farmsteads, and graveyards. These resources provide an opportunity to portray the life of mountain settlers from an earlier era.

Stone Mountain was authorized as a state park to protect its valuable geologic, biologic, scenic, recreational, and archaeological values. The Division of Parks and Recreation is charged with preserving these values and providing park experiences that promote pride in and understanding of the natural heritage of North Carolina.

II. HISTORY

Located in Wilkes and Alleghany counties, Stone Mountain State Park offers cascading waterfalls and cool mountain streams, quiet forests abundant with wildlife, scenic hiking trails and a historic mountain homestead.

One of the most spectacular features in Stone Mountain State Park is a 600-foot granite dome. This magnificent feature is part of a 25-square-mile pluton, an igneous rock formed beneath the earth's surface by molten lava. Over time, wind, water and other forces gradually eroded the softer layers of rock atop the granite block and exposed the outcrop we see today. Wet weather springs continually carve troughs in the granite as water runs down the sloping face of the mountain.



Hutchinson Homestead

In the 1960's, local citizens began efforts to establish a state park to protect the vast natural resources, scenic beauty, and recreational potential of the Stone Mountain area. At the urging of park advocates, in 1968 the North Carolina Granite Corporation, owner of much of the key acreage needed for the park, donated 418.50 acres that included Stone Mountain to the state "*...to be used for state park purposes.*" The donated land value was used as the match for federal grants from the Land and Water Conservation Fund (LWCF) and the Appalachian Regional Commission that funded the purchase of additional land from the corporation. Since Stone Mountain State Park was established in 1969, it has grown to become one of the largest state parks. Its combination of highly significant geologic, biologic, scenic, recreational, and cultural resources makes it a premier unit of the state parks system.

Established in 1969 and designated a National Natural Landmark in 1975, Stone Mountain is bounded by the Blue Ridge Parkway and the Thurmond Chatham Game Lands.

Long before becoming a state park, Stone Mountain was settled by families of English, German, Irish, French and Scotch-Irish descent who built the log homes, farms, mills, churches and schools needed for self-sufficient communities. Facilities in and near the park that provide a look into the history of the area include:

Mountain Culture Exhibit: Located at the park office, this exhibit tells the story of how the independent mountain settlers provided shelter, food and clothing for their families.

Hutchinson Homestead: Complete with a log cabin, barn, blacksmith shop, corncrib, meat house and original furnishings. Restored in 1998, the homestead is representative of the lives of early settlers in the area.

Garden Creek Church: Garden Creek Baptist Church is located on the bank of the East Prong of the Roaring River. Established in 1897, the building is one of the few original churches in Wilkes County that has not undergone any major repairs or remodeling. This structure is an inholding and located on private property.

As of June 1, 2016, Stone Mountain State Park manages 14,351 acres.

III. THEMES AND INVENTORY

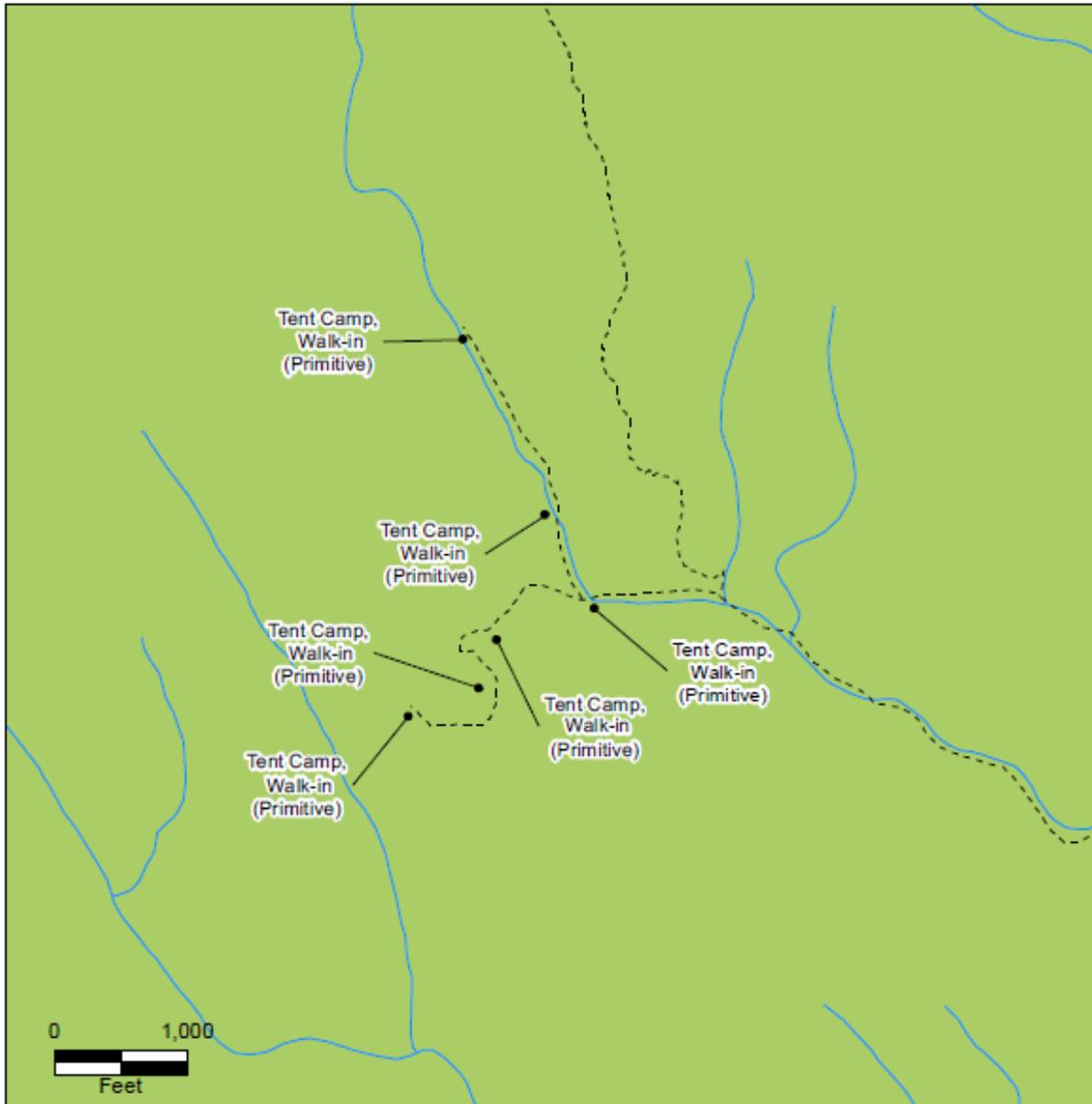
Theme Table for Stone Mountain State Park

Theme Type	Theme	Stone Mountain Significance	State Parks System Representation
Archeological/Historic	Cemetery	High	Adequate
Archeological/Historic	Public/Civic/Religious	High	Adequate
Archeological/Historic	Recreation	High	Adequate
Archeological/Historic	Rural-Domestic	High	Adequate
Archeological/Historic	Transportation	High	Moderate
Archeological/Prehistoric	Campsite/Activity Area	High	Adequate
Archeological/Prehistoric	Quarry-Other	High	Moderate
Archeological/Prehistoric	Rock Art	High	Moderate
Archeological/Prehistoric	Shelter/Cave	High	Adequate
Archeological/Standing Structure	Cemetery	High	Moderate
Archeological/Standing Structure	Commercial	High	Moderate
Archeological/Standing Structure	Industrial	High	Moderate
Archeological/Standing Structure	Mills	High	Moderate
Archeological/Standing Structure	Public Works	High	Moderate
Archeological/Standing Structure	Public/Civic/Religious	High	Adequate
Archeological/Standing Structure	Rural-Domestic	High	Adequate
Archeological/Standing Structure	Transportation	High	Moderate
Biological	Low Elevation Cliffs and Rock Outcrops	High	Moderate
Biological	Montane Oak Forests	High	Adequate
Biological	Piedmont and Mountain Glades and Barrens	High	Moderate
Biological	Piedmont and Mountain Dry Coniferous Forests	High	Adequate
Geological	Cliffs	High	Adequate
Geological	Dissected Uplands	High	Adequate
Geological	Exfoliation Outcrops	High	Adequate
Geological	Faults, Joints, and Related Features	High	Little
Geological	Gorges, Rapids, Waterfalls	High	Adequate
Geological	Inselbergs (Monadnocks)	High	Adequate

Geological	Intrusions	High	Adequate
Geological	Metamorphic Features	High	Adequate
Scenic	Caves/Cliffs	High	Moderate
Scenic	Forests	High	Moderate
Scenic	Gorges	High	Moderate
Scenic	Meadows/Grasslands	High	Little
Scenic	Rivers	High	Moderate
Scenic	Rock Outcrops	High	Moderate
Scenic	Scenic Highways	High	Little
Scenic	Scenic Vistas	High	Moderate
Scenic	Waterfalls	High	Adequate
Scenic	White Water Streams	High	Moderate

*See the System wide Plan for references to Theme and inventory terms. Themes have both actual and “potential” future needs to be at a park.

BACKPACK CAMPING AREA
STONE MOUNTAIN STATE PARK



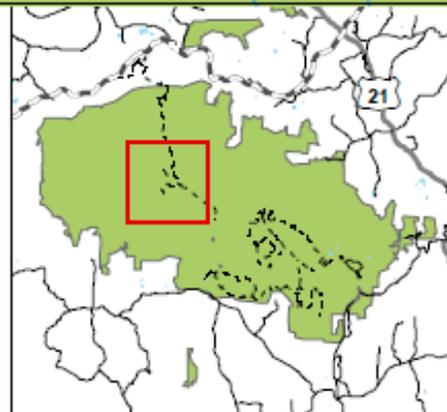
Stone Mountain
State Park
Facility Inventory

Backpack Camping Area

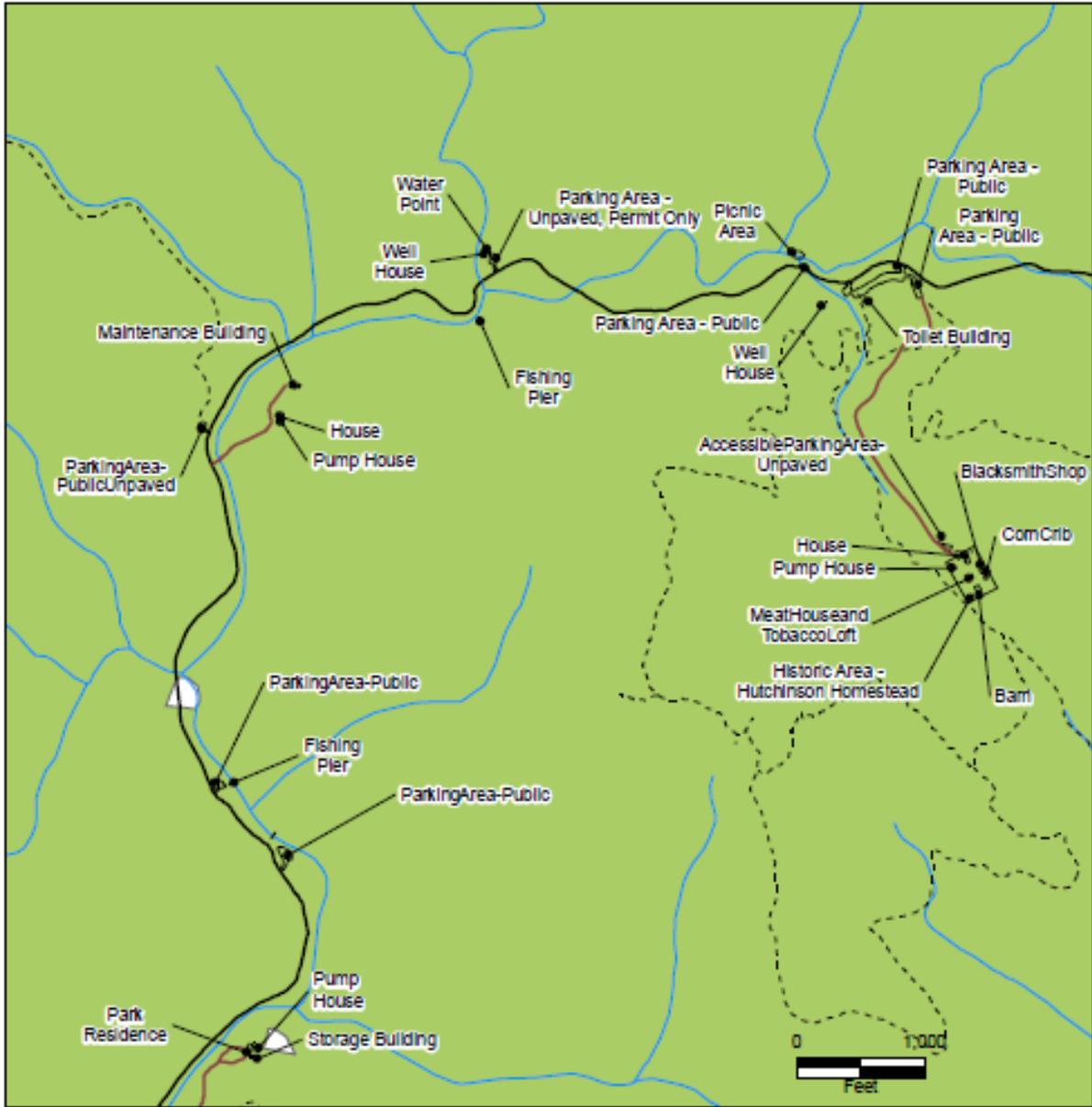
January 2017



- Existing Trail
- Existing Facilities
- State Parks Unit



ROARING CREEK CORRIDOR
 STONE MOUNTAIN STATE PARK



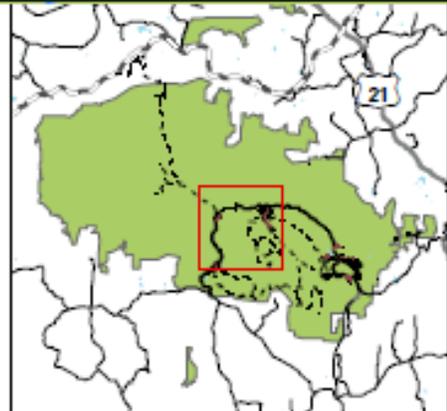
Stone Mountain
 State Park
 Facility Inventory

Roaring Creek Corridor

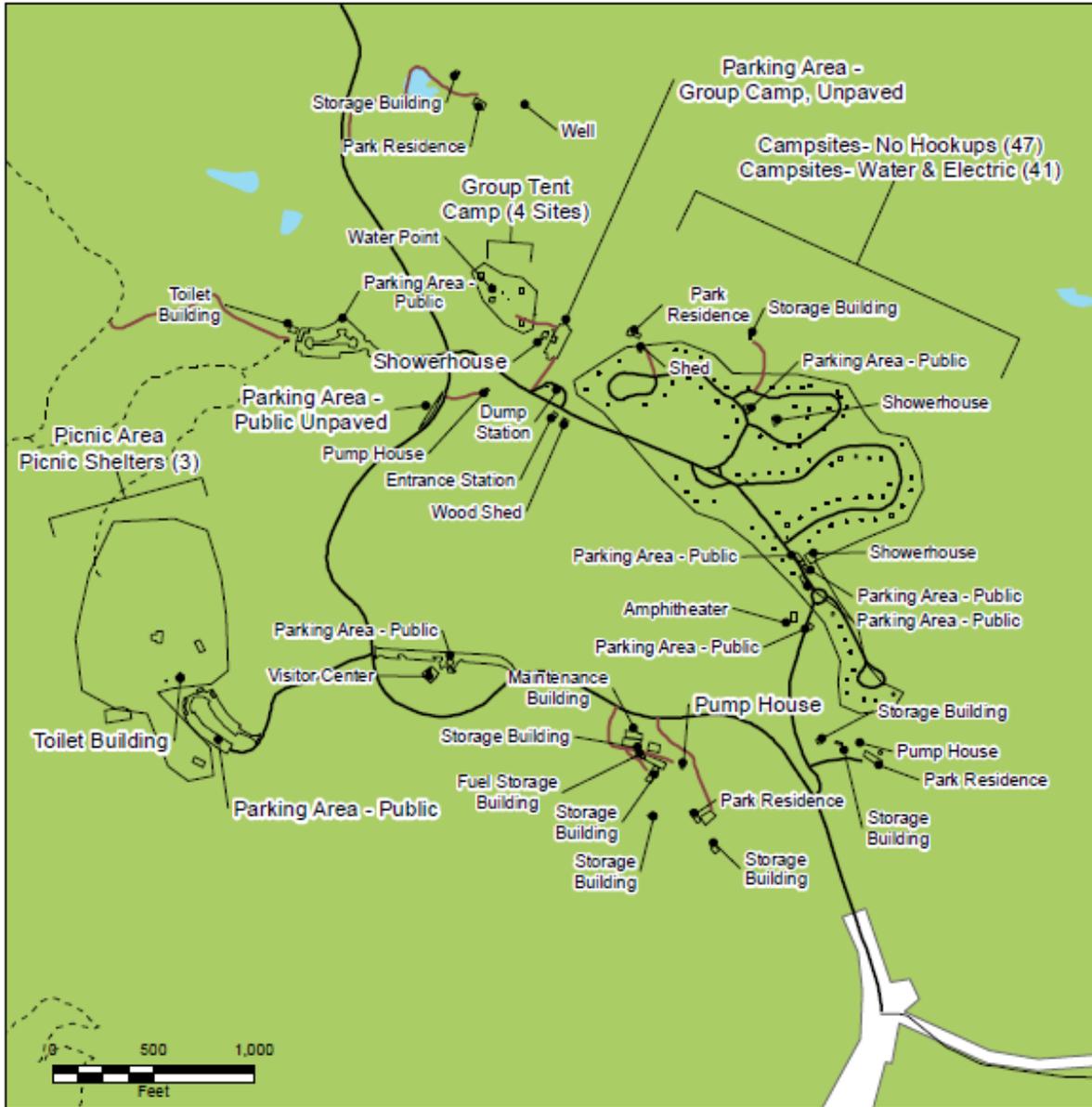
September 2016



- Existing Trail
- Road - Paved
- Road - Unpaved
- Existing Facilities
- State Parks Unit



FACILITY INVENTORY-CAMPGROUND /VISITOR CENTER
 STONE MOUNTAIN STATE PARK



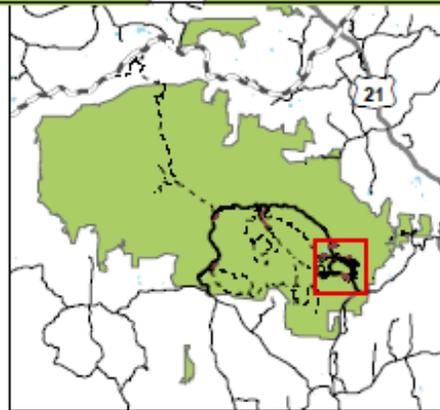
Stone Mountain
 State Park
 Facility Inventory

Campground/Visitor Center

January 2017



- Existing Trail
- Road - Paved
- Road - Unpaved
- Existing Facilities
- State Parks Unit



TRAIL INVENTORY
STONE MOUNTAIN STATE PARK

Trail Inventory	Hiking	Equestrian
Black Jack Ridge Trail	1.50	
Bridle Out and Back Trail		4.00
Bridle Loop Trail		2.00
Cedar Rock Trail	1.28	
Connector Trail	0.75	
Horse Trail	2.65	2.65
Horse Trail Ext.	1.35	1.35
Lower Falls / Middle Falls Trail	1.00	
<i>Mountains to Sea Trail</i>	6.00	
Stone Mountain Loop Trail	4.50	
Summit Trail	0.87	
Widow's Creek Trail	2.50	
Wolf Rock Trail	1.50	
Stone Mountain SP Totals (miles)	23.90	10.00

Hiking Trails:

Black Jack Ridge Trail: Access is located from Cedar Rock and Wolf Rock trails. This 1.50-mile trail follows an old road bed through heavily wooded areas. In the winter, this strenuous hike offers wonderful views of Stone Mountain.

Bridle Out and Back Trail: Trailhead is located from Equestrian Trail Parking area. This 4 mile, one way, out and back trail takes riders through wooded areas where you can see local wildlife, views of the Blue Ridge Mountain escarpment, and local liquor stills demolished during prohibition.

Bridle Loop Trail: The 2.0-mile equestrian trail begins at the horse trailer parking lot and ends at John P. Frank Parkway. This trail takes you through a wooded area where you can see local wildlife and also an old liquor still demolished during prohibition.

Cedar Rock Trail: Access is located from both Stone Mountain Loop and Wolf Rock trails. This 1.28-mile trail leads to Cedar Rock, a large granite outcrop allowing views to the south/southeast and a view of Stone Mountain and the Blue Ridge Mountain escarpment.

Connector Trail: is a 0.75-mile segment is located near the campground and Visitors Center.

Horse Trail: is a 2.65-mile one-way equestrian & hiking trail.

Horse Trail extension: is a 1.35-mile equestrian & hiking trail.

Lower Falls Trail /Middle Falls Trail: Available from Stone Mountain Loop Trail, this trail leads hikers a 1.00 mile along Big Sandy Creek to Middle Falls and then extends to Lower Falls. Trailhead is located from Stone Mountain Loop or Wolf Rock Trails.

Mountains-to-Sea Trail: A 6-mile section of the Mountains-to-Sea State Trail is located within the park boundary. The strenuous trail begins at the backpack parking area for the Widows Creek Trail and forks to the right at the backpack sites and continues for another 5.50 miles to the Devil's Garden Overlook on the Blue Ridge Parkway.

Stone Mountain Loop Trail: Start at the Upper Trailhead parking lot directly across from the campground road. This 4.50-mile strenuous trail takes you across the summit of Stone Mountain then by the Hutchinson Homestead and a 200-foot waterfall. Hikers can choose to go out to the waterfall or the summit and back without having to do the entire loop. This trail can also be accessed from the Lower Trailhead parking lot but remember which parking lot you started from. The TRACK Trail is located on a portion of the trail from the Lower Trailhead parking lot to the Hutchison Homestead.



Stone Mountain Loop Trail

Summit Trail: is a 0.87-mile difficult hiking trail

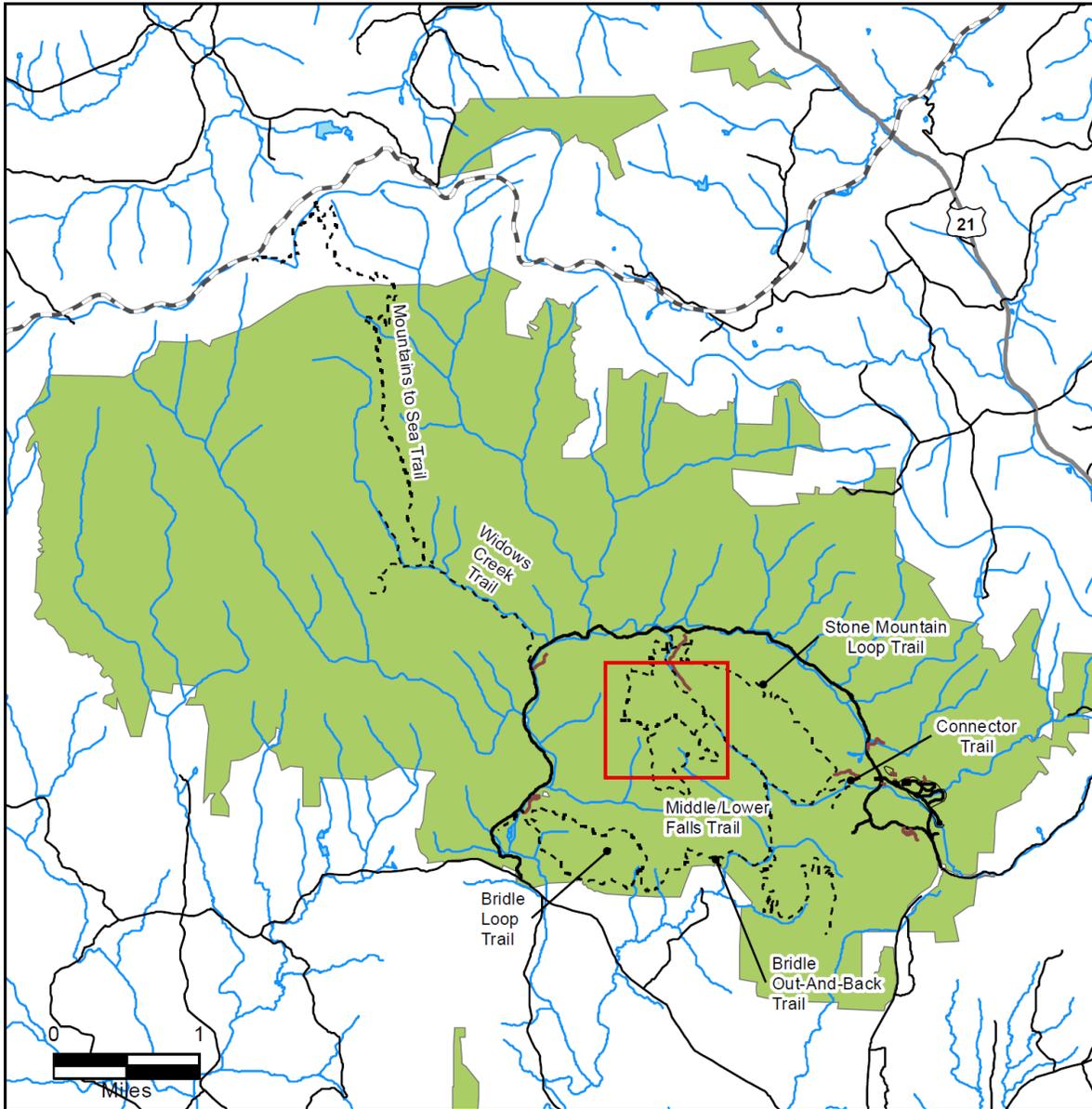
Widow's Creek Trail: This trail is entered from the backpack parking area. The trail follows Widow's Creek for 2.50 miles to the different backpack sites and stops. To view Widow's Creek Falls, park just beyond the Widow's Creek Bridge and walk a short distance upstream.



Widow's Creek Trail

Wolf Rock Trail: This 1.50-mile trail is entered from Stone Mountain Loop Trail and provides views of the Blue Ridge Mountain escarpment. The ridges dividing three watersheds: Garden Creek, Widow's Creek and Bullhead Creek can also be seen from atop Wolf Rock. Signs of old field succession are evident along the trail as it leads through areas which are predominantly pine, then mixed pine-hardwood and mature hardwood.

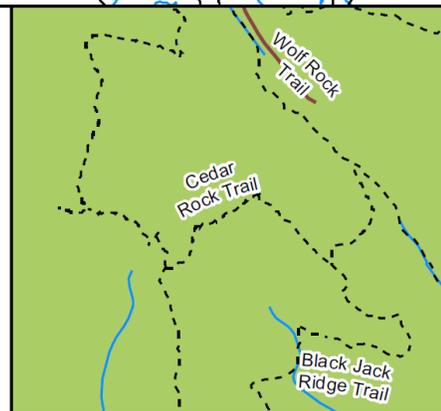
TRAIL INVENTORY
STONE MOUNTAIN STATE PARK



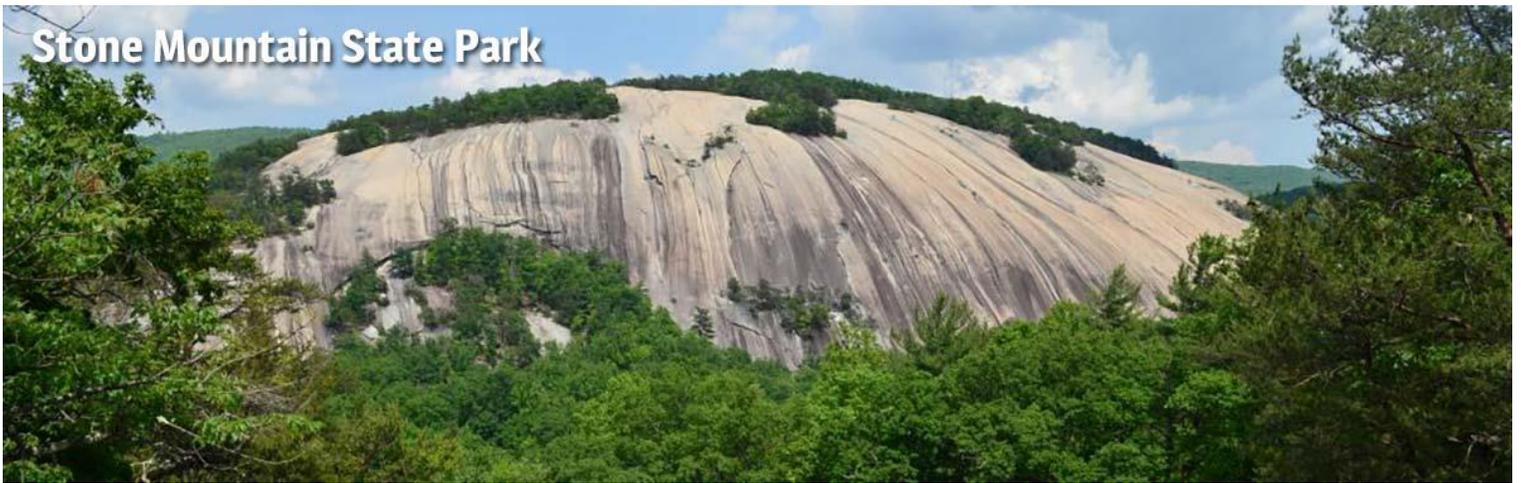
Stone Mountain
State Park
Trail Inventory

September 2016

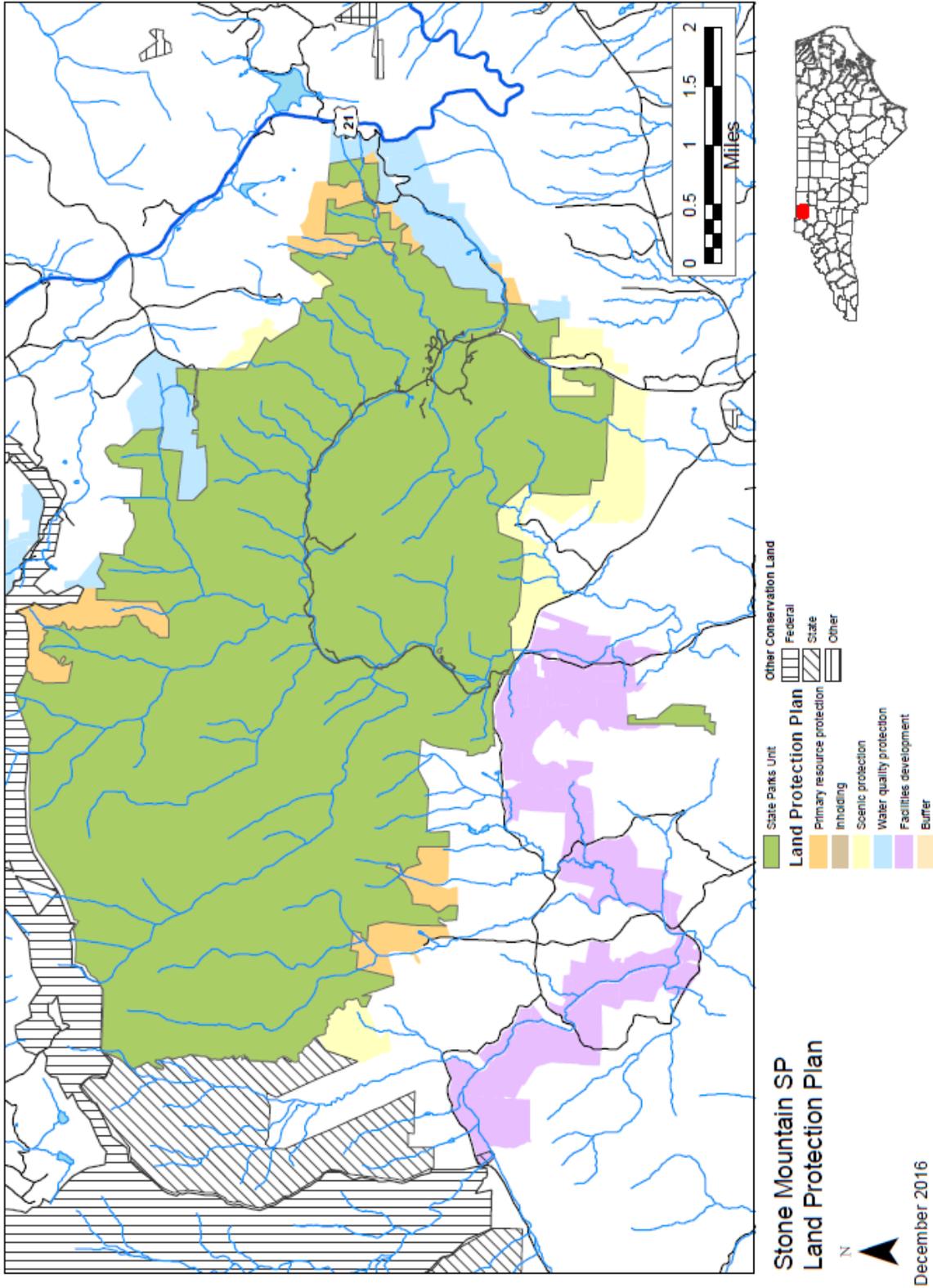
- Existing Trail
- Road - Paved
- Road - Unpaved
- Existing Facilities
- State Parks Unit



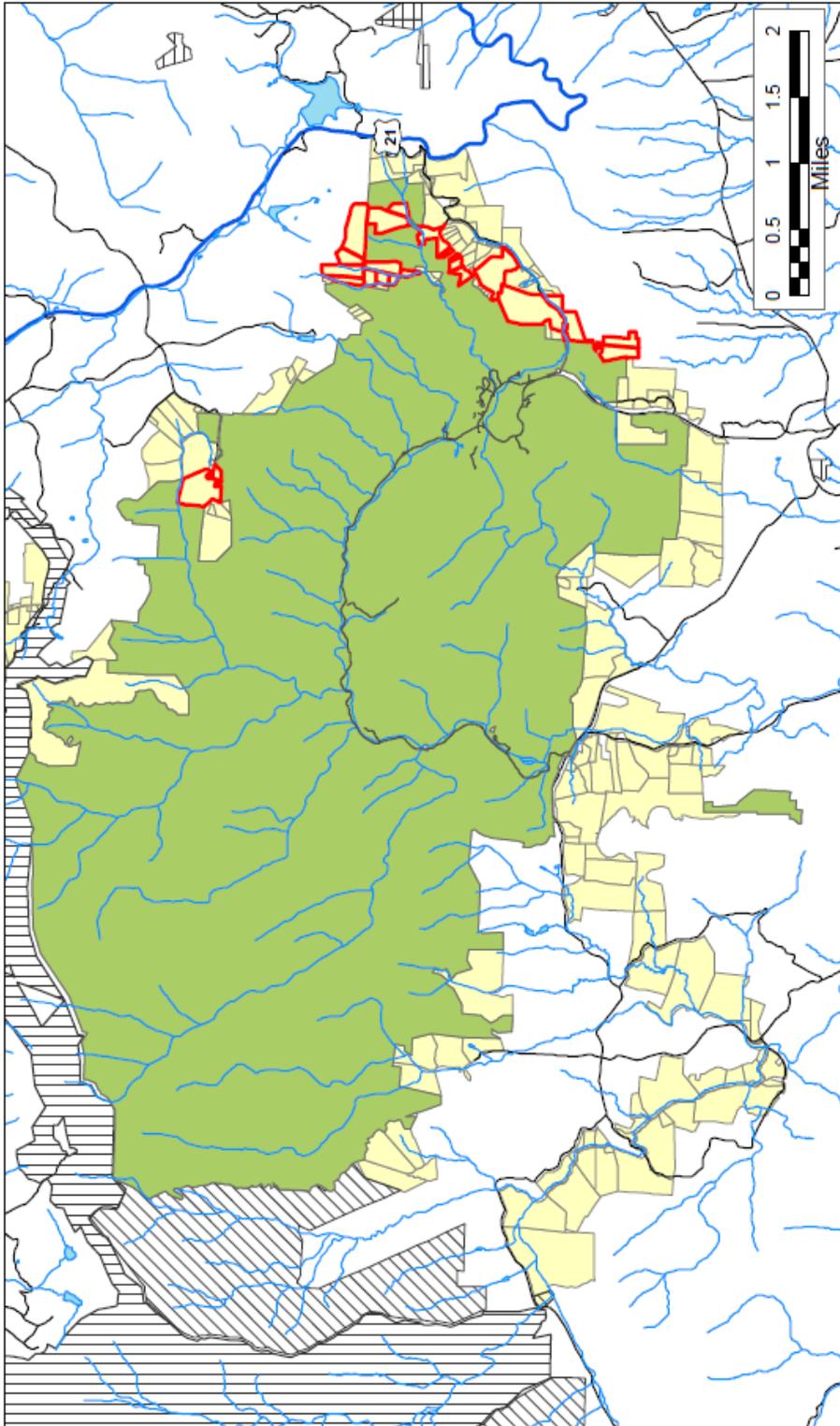
IV. PLANNING



LAND PROTECTION PLAN
STONE MOUNTAIN STATE PARK



LAND PROTECTION PLAN-CRITICAL TRACTS
 STONE MOUNTAIN STATE PARK



Stone Mountain SP Critical Acres

- State Parks Unit
- Critical Need
- Future Need
- Other Conservation Land
- Federal
- State
- Other



December 2016

PROJECT EVALUATION PROGRAM LIST
STONE MOUNTAIN STATE PARK

Project	Project Title	Cost
1	Museum Exhibits, VC Expansion & Parking improvements	\$1,815,560
2	Mountains to Sea Trail (MST)	\$331,173
3	L-Group Camp Development	\$676,803
4	Parkwide replacement of aged one-lane bridges	\$3,254,641
5	Parkwide Trail Improvements	\$433,952
6	Maintenance Area Improvements	\$932,774
7	Grade, Widen, Gravel, and Pave remaining Park Rd.	\$800,000
8	Replace Big Sandy Culvert with Arched Culvert	\$506,277
9	Camper Cabins	\$250,000
TOTAL		\$9,001,180

1 Museum Exhibits, Visitor Center Expansion, & Parking Improvements

Improve visitor center experience by expanding the existing facility to include exhibit space, classroom/ auditorium space, upgraded restroom facilities and septic field for increased occupancy rates associated with (Min. 2000+ square feet) growth. Improvements are also proposed for the parking lot to improve circulation and expand capacity. Currently, the circulation pattern is confusing and the entrance is not clear.

Inadequate indoor space currently exists at the visitor center, (built in 1992), or elsewhere within the park for environmental education and exhibits essential to meeting the purpose of promoting pride and understanding of the natural heritage. The visitor center lacks adequate space to accommodate the many school groups that visit the park, so most programs must be conducted outside where they are subject to adverse weather. The existing park office is also crowded with the administrative park offices.

This project calls for expansion and improvement of the visitor center to alleviate the existing problems and to serve the public by better fulfilling the environmental education responsibilities. Additions will include a 2,000 SF accessible auditorium and exhibit area. The annex expansion will construct space that is now standard at State Park visitor centers. The added indoor space will allow environmental education programs to be offered to schools and other large groups any time of the year. Exhibits focusing on the natural heritage will be created for installation in the additional space, and septic system upgrades to the existing system will be made to accommodate the additional visitation to the building due to its expansion. 133 parking spaces and seven (7) designated school bus/ recreational vehicle parking spaces are proposed.

A one-mile accessible interpretive trail that begins and ends at this proposed Visitor/Environmental Education Center would be constructed to give an opportunity to experience Stone Mountain State Park.

2. **Mountains to Sea Trail (MST)**

This project has been developed to meet visitor demand by providing increased backcountry hiking and camping opportunities for park visitors. Only six (6) backcountry camping sites are currently located in the park. General trail improvements including proposed trail and renovation of part of the existing 6-mile-long one-way trail system, located in the northwest section an adequate number of back country campsites will be installed. The project will help open up under used, remote areas of the park by providing opportunities for varied day or multi-day backcountry hiking and camping trips in areas that are currently inaccessible to the general public.

Hiking one-way long distances often involves inconvenient and inexact coordination of drop off and pick up times and places or the use of multiple vehicles. Stone Mountain offers the potential for outstanding and varied distance loop hikes that could begin and end at the same trailhead. Hikers would choose varying routes depending on their experience and desired length of stay. Additional trail segments beyond those connecting the camping nodes are proposed to allow better connectivity and enhanced hiking and backcountry experiences. For example, park visitors on the Mountains-to-Sea Trail, could also connect to these routes.

Due to topographic constraints and sensitive natural features, the actual alignment of the trails and camping nodes will need to be field located by staff. Four (4) stream crossings will use either pedestrian bridges or flat boulders to cross over Widow's Creek and Bullhead Creek. This project proposes to locate campsites adequately spaced so that they are located a moderate day hike apart. The proximity to the Blue Ridge Parkway provides for the long distance hiking needs of the region. The camping design standard would be minimum 10 to maximum 20 miles apart.



Mountains to Sea Trail

3. **L-Group Camp Development**

Group camp development will construct up to four (4) group camps at a feasible location. Acquisition of land outside of the current park boundary will be necessary prior to this project being funded as no suitable sites within the existing park boundary have been identified. There is a high demand for group camping in the area, however steep slopes and sensitive natural features are constraints.

The project scope and cost of this project will be field verified to the site selected. The scope of work will include: gravel entrance road, gravel parking lot, connecting trail system, grading, storm drainage, a proposed septic system for shower house, well and water lines, underground electric service, fencing, grills, fire rings and (10) scattered picnic tables.

4. Parkwide Replacement of Aged One-Lane Bridges

This project will replace nine (9) old, heavy timber, one-lane bridges with modern two-lane, arched culverts. The old type of bridge is currently being phased out of the N.C. Department of Transportation (NCDOT) bridge maintenance program. The proposed culverts will improve traffic safety, have a longer life span, and require less maintenance than the existing bridges.

5. Parkwide Trail Improvements

Park-wide trail improvements will be made by this project identified by a future assessment of existing trails. This may require an increase over the current cost estimate at the time of project approval. This does not include permitting, stream crossings, bridges and engineering consultant fees.

6. Maintenance Area Improvements

The existing maintenance area is inadequate to serve the maintenance and repair needs of the park. This project will make needed improvements that include tree clearing, paving, improving the access road, extension of water and electric lines, construction of a warehouse, lumber shed, a five-bay vehicle storage building, a two-bay auto shop, and a flammable-liquid storage building.

7. Grade, Widen, Gravel, and Pave Remaining Park Road.

This project calls for grading, storm drainage, erosion control, widening, and installation of gravel and paving of the 1.10 miles of unpaved park entrance road. Asphalt paving will reduce the amount of dust thrown up by vehicles and the amount of sediment that flows into the East Prong Roaring River that runs parallel to John Frank Parkway.

8. Replace Big Sandy Culvert with Arched Culvert

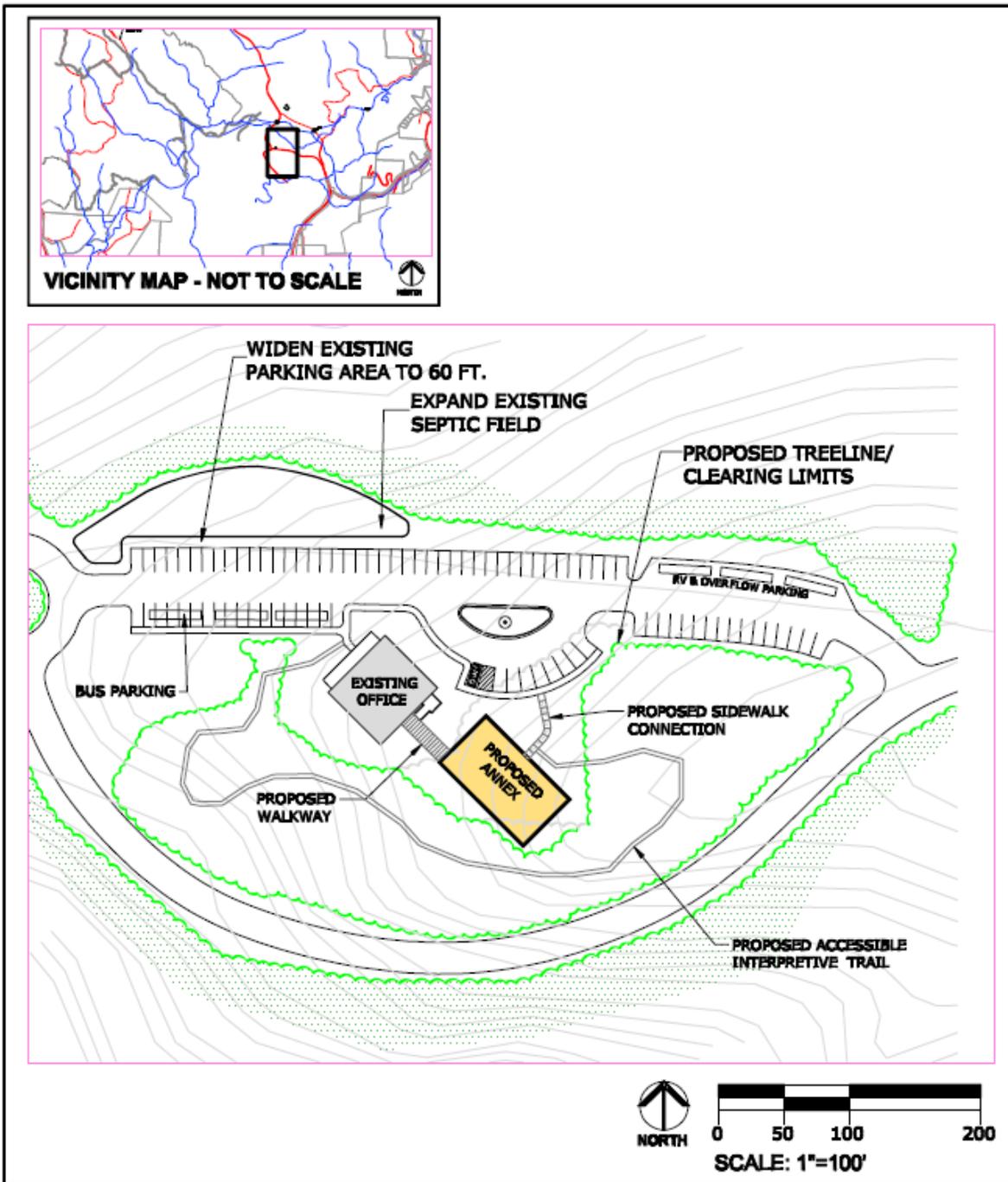
At Big Sandy Creek road crossing, downstream from the park office, replace the existing ten-foot oval corrugated metal pipe culvert with an arched culvert. The existing culvert is too small during periods of heavy stream flow. The proposed culvert will allow improved, unimpeded stream flow for trout swimming upstream while allowing safer, two-way vehicular traffic across the 25 feet side bridge.

9. Camper Cabins

Four (4) cabins with electricity, but no water or plumbing will be located north of the RV family campground and use 4 existing group camp sites. A shower house is located near the parking lot.



PROJECT #1: MUSEUM EXHIBITS; VISITOR CENTER EXPANSION, AND PARKING IMPROVEMENTS
 STONE MOUNTAIN STATE PARK

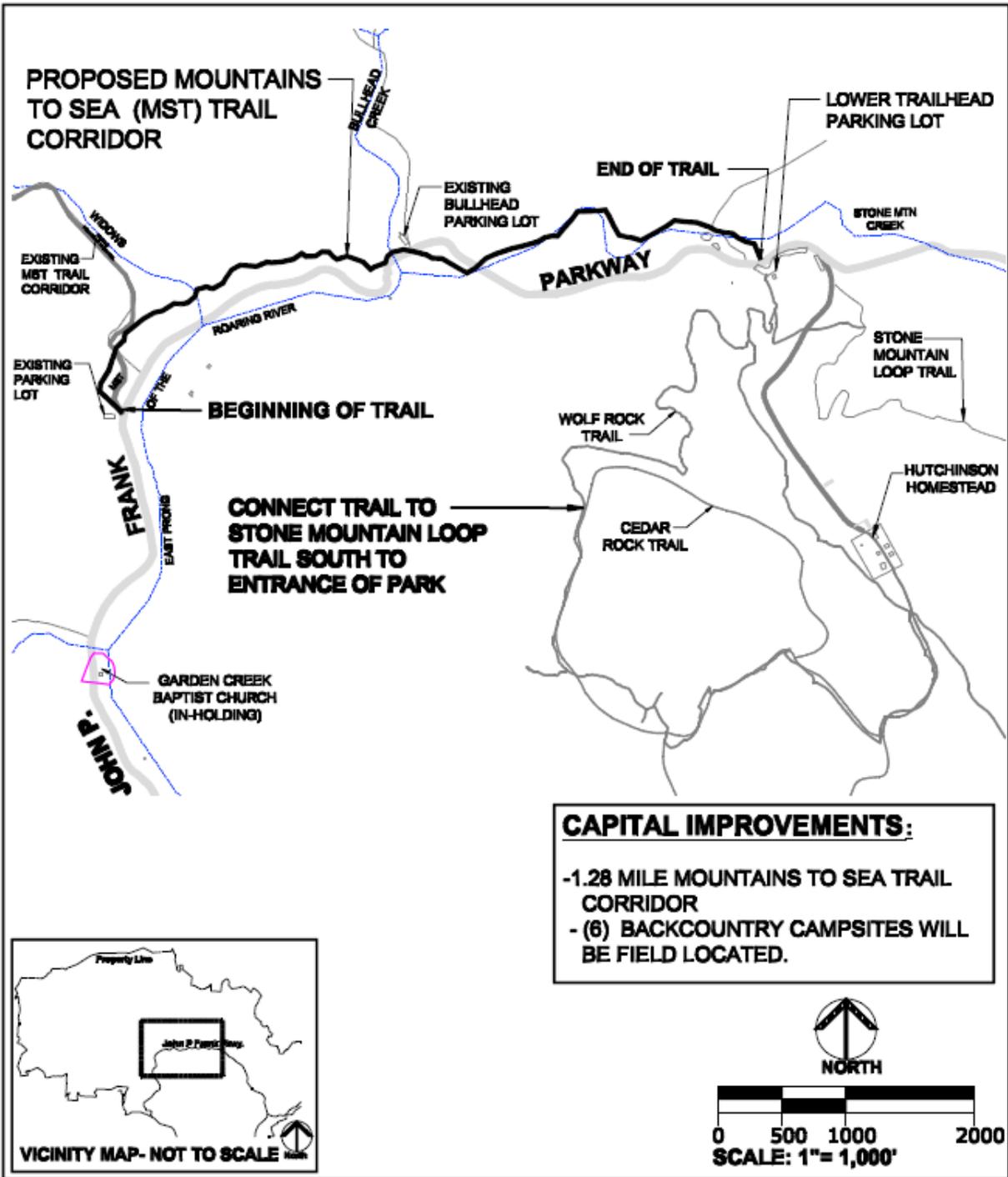


JAN 2017
 Date: DECEMBER 2011
 Drawn By: .CR

Stone Mountain State Park
Proposed Visitor Center Annex

 **N.C. Division of Parks and Recreation**
 Mail Service Center 1615
 Raleigh, N.C. 27699-1615

PROJECT #2 MOUNTAINS TO SEA TRAIL (MST)
 STONE MOUNTAIN STATE PARK



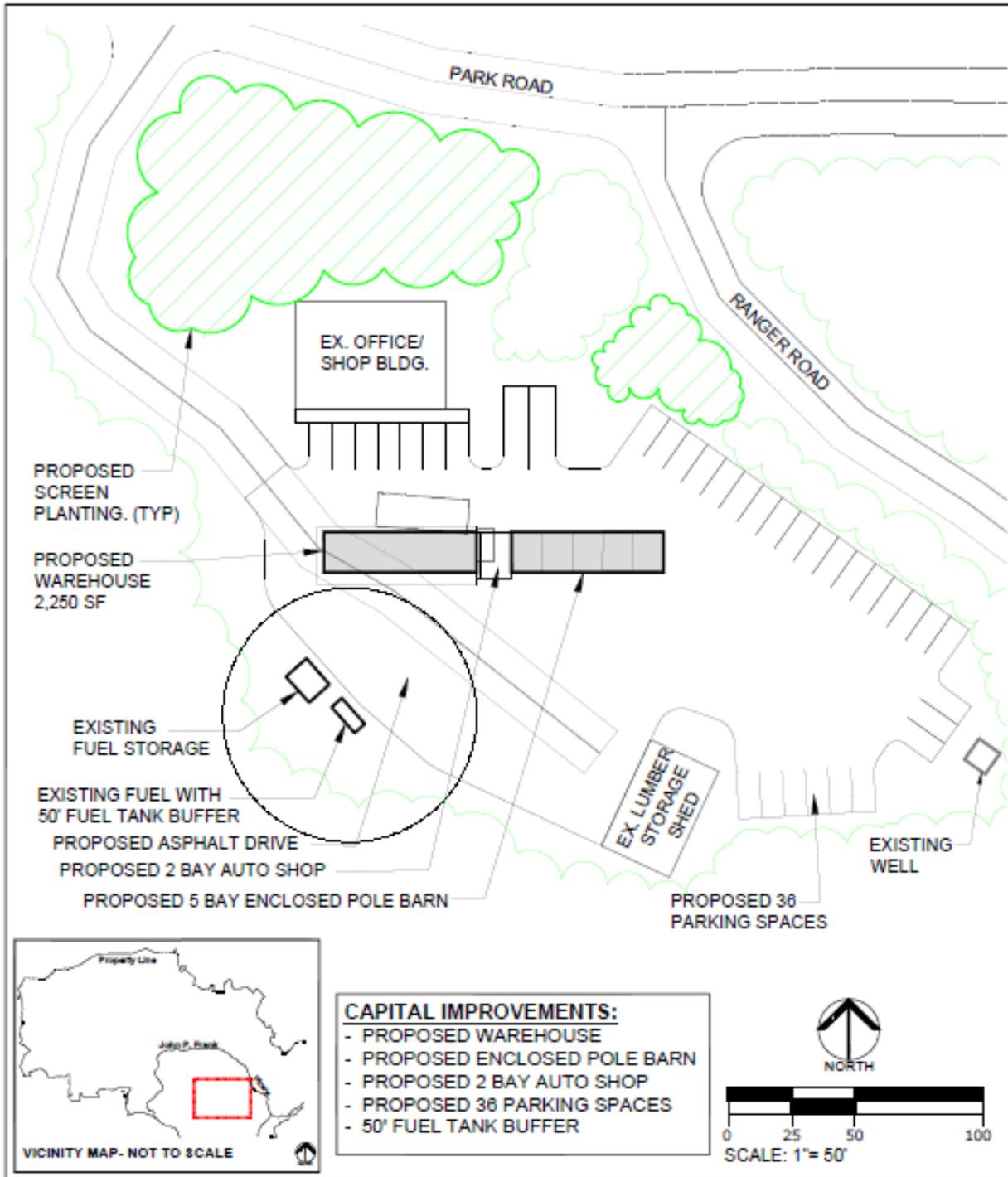
North

Date: JAN 2017; AUGUST 2018
 Drawn By: C

Stone Mountain State Park
 Mountains to Sea
 Conceptual Trail Plan

N.C. Division of Parks and Recreation
 Mail Service Center 1615
 Raleigh, N.C. 27689-1615

PROJECT # 6: MAINTENANCE AREA IMPROVEMENTS
 STONE MOUNTAIN STATE PARK



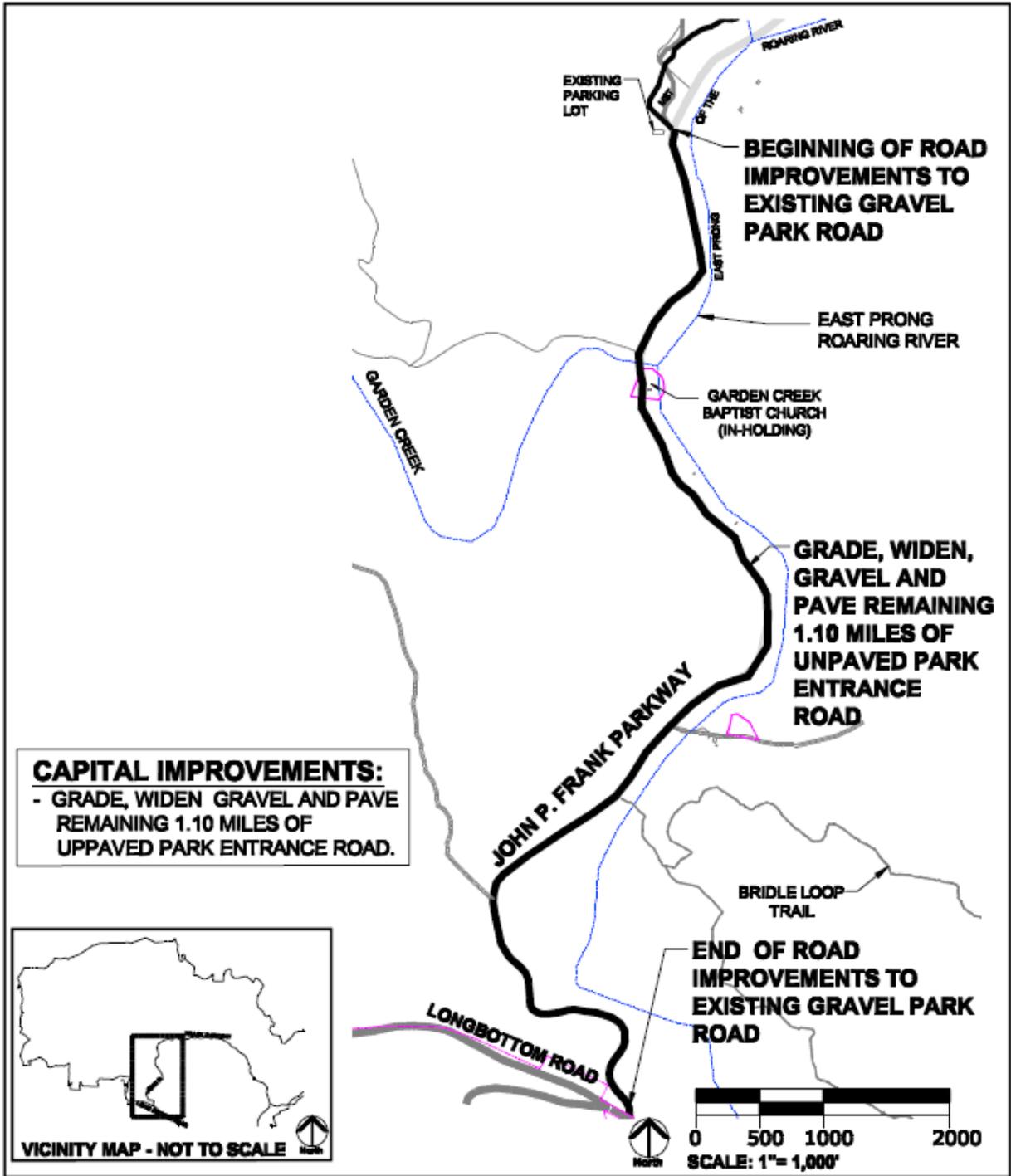
Date: FEB 2017
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Stone Mountain State Park
 Maintenance Area Improvements



N.C. Division of Parks and Recreation
 Mail Service Center 1615
 Raleigh, N.C. 27699-1615

PROJECT #7 GRADE, WIDEN, GRAVEL, AND PAVE REMAINING PARK ROAD
 STONE MOUNTAIN STATE PARK

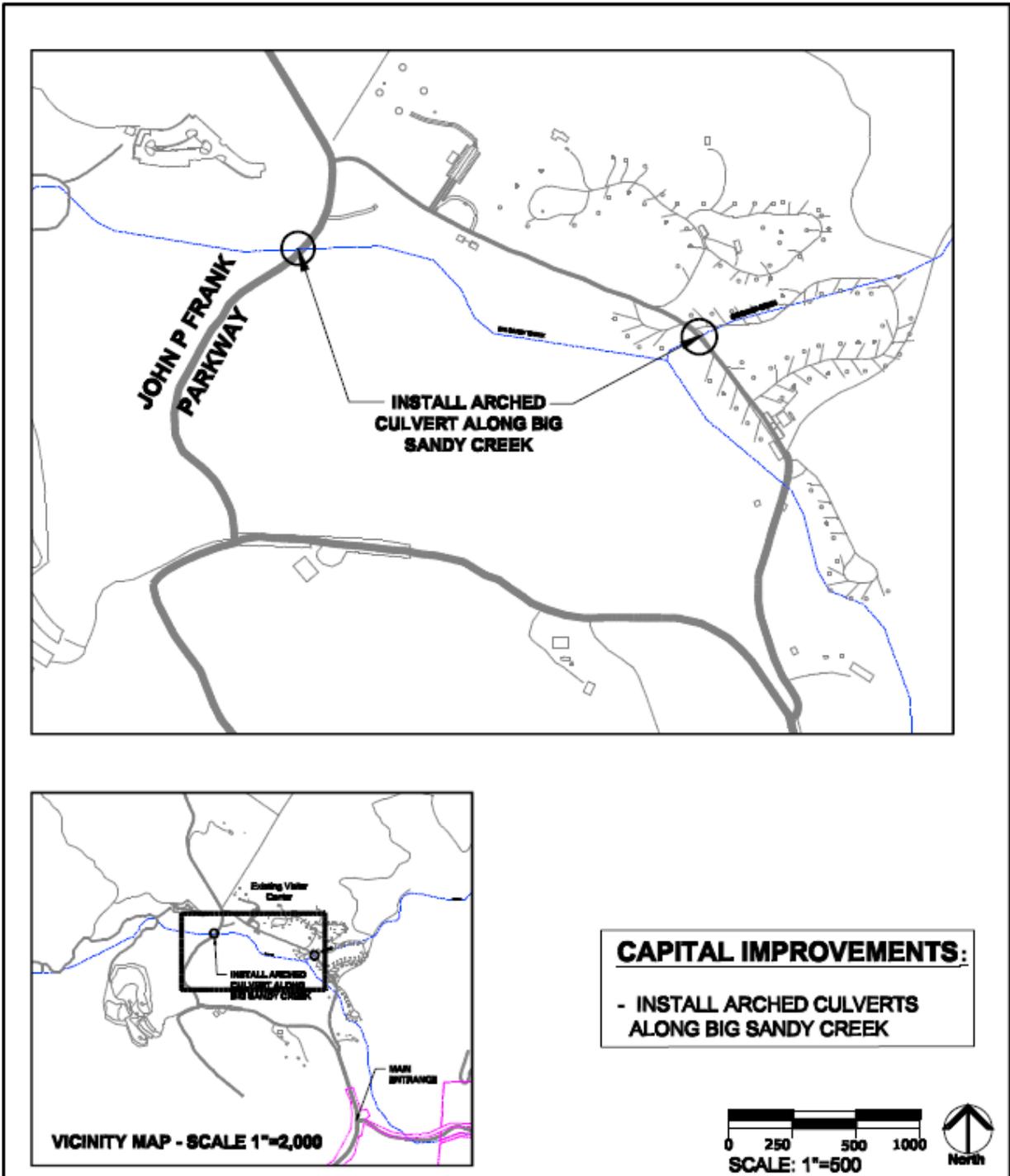


Date: SEPT 2016, NOV 2016
 Drawn By: CR

Stone Mountain State Park
 Road Improvements along
 John P. Frank Parkway

N.C. Division of Parks and Recreation
 Mail Service Center 1615
 Raleigh, N.C. 27609-1615

PROJECT #8: REPLACE BIG SANDY CULVERT WITH ARCHED CULVERT
 STONE MOUNTAIN STATE PARK



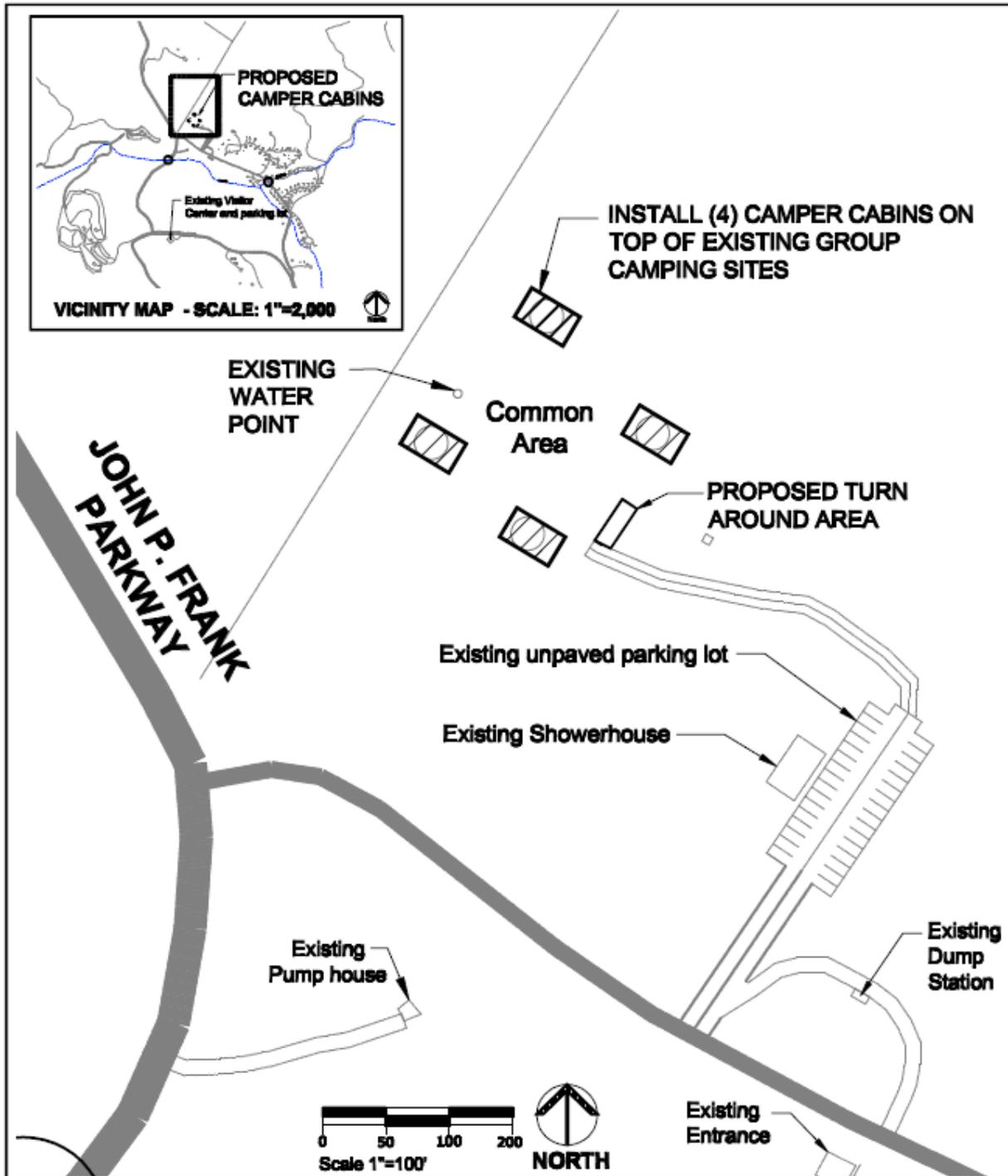
CAPITAL IMPROVEMENTS:
 - INSTALL ARCHED CULVERTS
 ALONG BIG SANDY CREEK

Date: NOVEMBER 2016
 Drawn By: CR

Stone Mountain State Park
 Replace Big Sandy Culverts with
 Arched Culverts

 **N.C. Division of Parks and
 Recreation**
 Mail Service Center 1615
 Raleigh, N.C. 27609-1615

PROJECT #9: CAMPER CABINS
 STONE MOUNTAIN STATE PARK

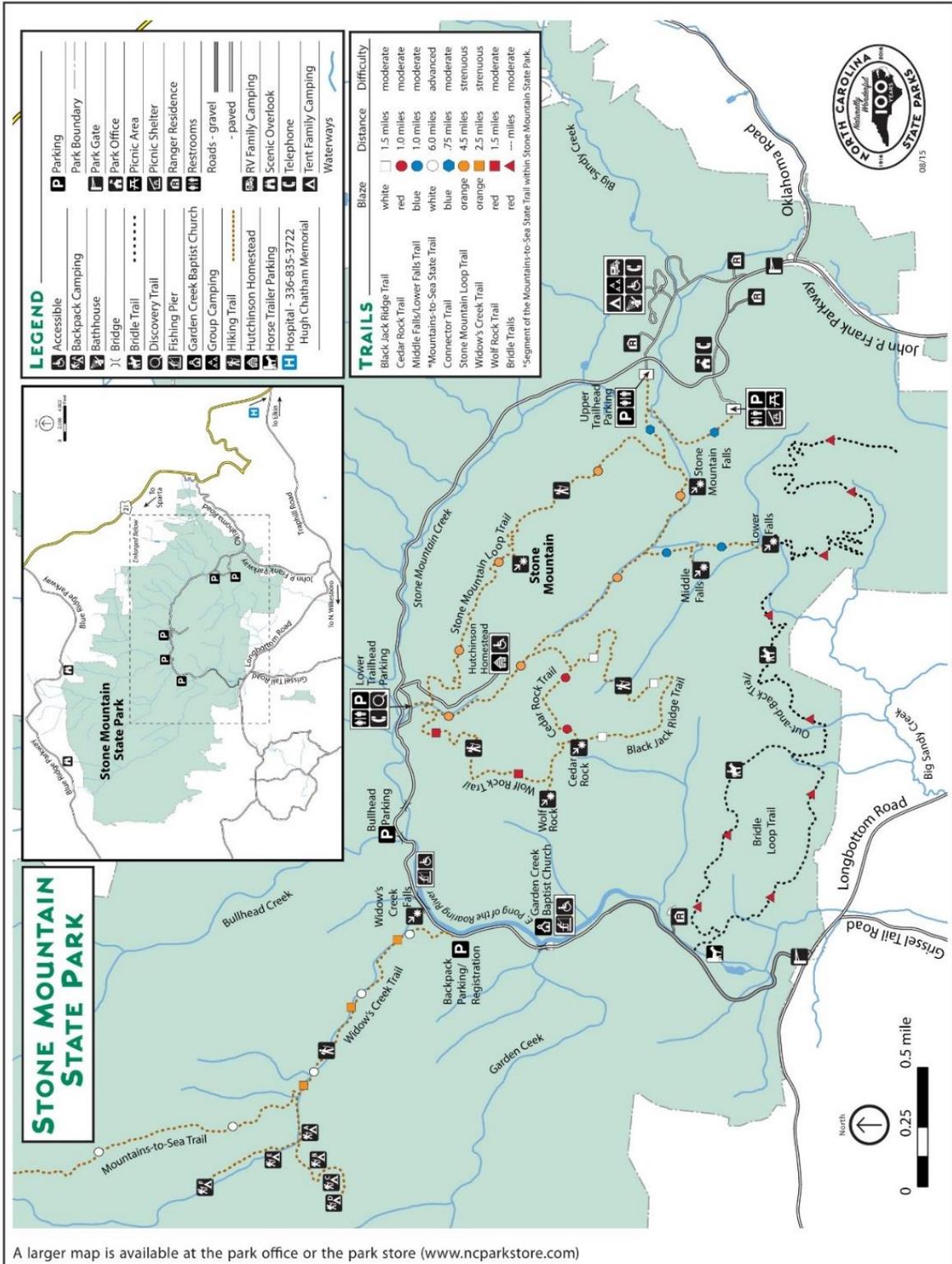


Date: Jan. 2017; Nov. 2016
 Drawn By: GR

Stone Mountain State Park
 Camper cabins

 N.C. Division of Parks and Recreation
 Mail Service Center 1015
 Raleigh, N.C. 27699-1015

PARK MAP STONE MOUNTAIN STATE PARK



A larger map is available at the park office or the park store (www.ncparkstore.com)