The First Phase of an Innovative Academic Partnership between University of Georgia and Nanjing Forestry University

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The Soul of the Community study identified 11 domains with varying levels of impact in driving
community attachment to a place [http://www.soulofthecommunity.org/ A Study by the Knight-Ridder Foundation, all of which apply to the Town Spring site.]

1. **Social offerings**: Entertainment infrastructure for people to meet each other and how much
   residents care about each other.
2. **Openness**: How welcoming the community is to different types of people.
3. **Aesthetics**: An area's physical beauty and green spaces.
4. **Education**: Quality of K-12 schooling and local colleges and universities.
5. **Basic services**: Infrastructure supports, including highways, housing and health care.
6. **Leadership**: Rating of leadership and whether elected officials represent residents' interests.
7. **Economy**: Local economic and employment conditions.
8. **Emotional wellness**: The mixture of mental and physical well-being.
9. **Safety**: Local crime and safety conditions.
10. **Social capital**: The personal connections residents have to each other.
11. **Civic involvement**: Voting, volunteering, attending meetings, and working for change.

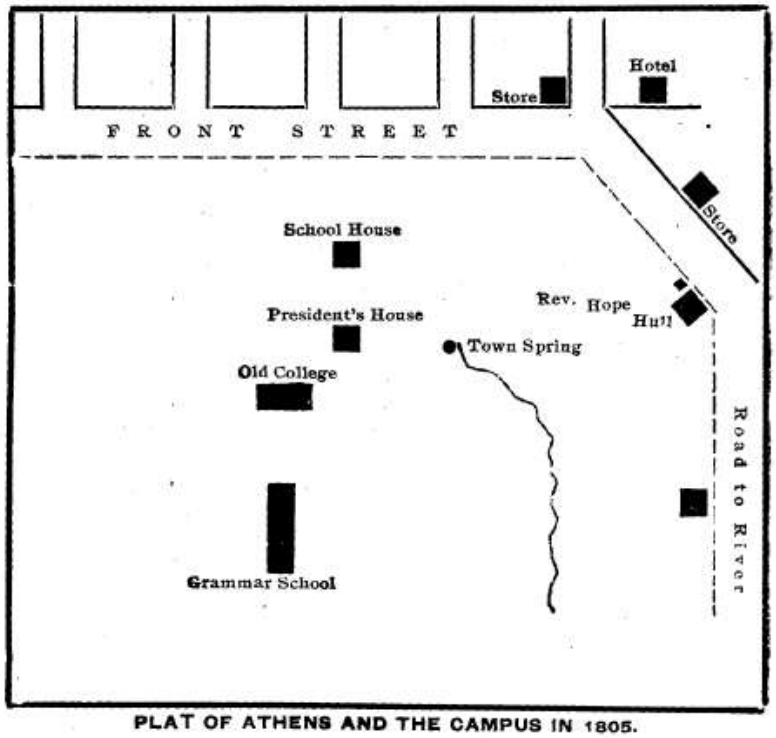
Water: the Source and the Outlet
Part 1: The Spring Itself (Kuo, Yuan)

I. Flow Analysis

A. History of the Town Spring: Where did it originate from, where's the historical spring path?

> "The grading of the North Eastern Railroad developed a mineral spring not far from the depot which was called the Ferro Lithic Sprmg and became quite a popular resort. The water was a strong chalybeate and numbers of dyspeptics made daily pilgrimages to drink it and were cured — or thought they were, which answered the same purpose. It was really a valuable spring, and many teething babies were helped by its use."
>
> "It served as Athens' primary water source for decades, and its water was later pumped into a cistern in the mid-1800s. Eventually covered up by a lumber yard, the stream still is only partially 'daylighted,' or exposed to the open air, while much of the stream, which flows into the North Oconee River, is piped underground."

The stream head is thought to reside under the Central Duplicating Services building.



PLAT OF ATHENS AND THE CAMPUS IN 1805.

A plat of the town and campus, made by Mr. Meigs and Mr. Hull, by direction of the board, shows at this time but few houses on the college grounds. The Old College, east of that the president's house, a story and a half frame dwelling which was afterward removed .to make room for the brick house now standing; the grammar school near the spot now occupied by Professor Willcox's house, and another wooden building on the present site of the Phi Kappa

hall, the one spoken of in the Chronicle as "equal to a temporary school-room"—a single room twenty feet square, with a chimney at one end, an unglazed window at the other and a door in each side—these comprised the improvements on the campus. No fence enclosed the area, but all was open, while Front street, now known as Broad, was a lane cleared through the woods and doubtless full of stumps.

B. In larger scale, connection with other water bodies
See Appendix 1

C. Storm and draining system map, pipe categories
See Appendix 2

Water Flow Chart relating to the Pipe Size

Size (ID, inches)	Length (inches)	Flow (GPM)
1/2	4.25	26
3/4	4.62	50
1	5.00	94
1-1/2	6.50	260
2	7.00	480
2-1/2	7.50	750
3	8.00	1300
4	9.00	2300
6	15.50	5400

D. Listed below are some typical stormwater treatments collected from Green

<u>Stormwater Ponds</u>
Stormwater ponds are constructed Stormwater ponds are constructed stormwater retention basins that have a permanent pool (or micropool) of water. Runoff from each rain event is detained and treated in the pool. Pond design variants include:

- o Wet Pond
- o Wet Extended Detention Pond
- o Micropool Extended Detention Pond
- o Multiple Pond Systems

<u>Stormwater Wetlands</u>
Stormwater wetlands are constructed wetland systems used for stormwater management. Stormwater wetlands consist of a combination of shallow marsh areas, open water and semi-wet areas above the permanent water surface. Wetland design variants include:

- o Shallow Wetland
- o Extended Detention Shallow Wetland
- o Pond/Wetland Systems
- o Pocket Wetland

<u>Bioretention Areas</u>

Bioretention areas are shallow stormwater basins or landscaped areas that utilize engineered soils and vegetation to capture and treat stormwater runoff. Runoff may be returned to the conveyance system, or allowed to fully or partially exfiltrate into the soil.

Sand Filters

Sand filters are multi-chamber structures designed to treat stormwater runoff through filtration, using a sand bed as the primary filter media. Filtered runoff may be returned to the conveyance system, or allowed to fully or partially exfiltrate into the soil. The two sand filter design variants are:

- o Surface Sand Filter
- o Perimeter Sand Filter

Infiltration Trenches

An infiltration trench is an excavated trench filled with stone aggregate used to capture and allow infiltration of stormwater runoff into the surrounding soils from the bottom and sides of the trench.

Enhanced Swales

Enhanced swales are vegetated open channels that are explicitly designed and constructed to capture and treat stormwater runoff within dry or wet cells formed by check dams or other means. The two types of enhanced swales are:

- o Dry Swale
- o Wet Swale/Wetland Channel

Stormwater Harvesting

In light of the recent drought, it has become increasingly important to be proactive in the way UGA manages its natural resources. Rainwater harvesting allows the University to supply water for irrigation, cooling towers, and for toilet flushing even under water restrictions.

Green Roofs

Green roofs are encouraged as part of new construction to lower heat island effect, energy bills, and stormwater discharge. They also create habitat for plants and animals and become an aesthetic enhancement to a building. Although there is currently no standard for green roofs there are a few existing green roofs on campus that may act as guides for future designs.

Limited application structural controls are those that are recommended only for limited use or for special site or design conditions. Generally, these practices: (1) cannot alone achieve the 80% TSS removal target, (2) are intended to address hotspot or specific land use constraints or conditions, and/or (3) may have high or special maintenance requirements that may preclude their use. Limited application controls are typically used for water quality treatment only, including:

Biofilters

- o Filter Strip
- o Grass Channel

Filtering Practices

- o Organic Filter
- o Underground Sand Filter

Wetland Systems
- o Submerged Gravel Wetland

Hydrodynamic Devices
- o Gravity (Oil-Grit) Separator

Porous Surfaces
- o Modular Porous Paver Systems
- o Porous Concrete

Chemical Treatment
- o Alum Treatment System

Proprietary Systems
- o Commercial Stormwater Controls

Detention Controls

Detention structural controls are used only for providing water quantity control (channel protection, overbank flood protection, or extreme channel protection), and are typically used downstream of a general application or limited application structural control. Types of detention controls include:

- o Dry Detention and Dry Extended Detention Basins
- o Multi-purpose Detention Areas
- o Underground Detention

II. Aesthetic & Functions of Stormwater Management

A. Case study according to function categories:

B. Creation of Park Amenity

Blackberry Creek Daylighting Project, Berkeley

Blackberry Creek is located on the property of an elementary school. The idea for daylighting the creek came directly from PTA members (Parent-Teacher Asociation) and was implemented in combination with a new park design

C. Economic Development / Flood Reduction

Arcadia Creek Festival Place in Kalamazoo, Michigan

Daylighting portion of the stream was an integral part of the city's overall 13-block redevelopment plan, it represents one of the most highly urbanized locations known to be daylighted. It involved the acquisition and demolition of property, including an existing public parking lot, to make room for the daylighted channel and stormwater pond. It is considered a successful project because the resulting "stream" and "pond" have worked very well to mitigate the urban flooding problems Kalamazoo had been facing for years. Downtown businesses no logner have to pay flood insurance, there's protection from a 500-year storm event, and the city's floodplain map was completely redrawn. Other financial benefits have since manifested: the site now generated approximately $12

million annually in festival and concert fees, which has more than paid for the $7.5 million price tag associated with the park's creation as well as its $50,000-per-year maintenance costs.

D. Ecological Restoration

Jenkins Creek in Maple Valley, Washington

The daylighting and restoration of Jenkins Creek was part of a comprehensive county-wide watershed management plan targeting the Soos Creek basin southeast of Seattle. The creek flows from a county park in the Lake Wilderness area, yet development had still managed to alter it: two sections ran in underground pipes since the 1950s, negatively impacting water quality and preventing fish passage to a nearby lake.

The watershed management plan emphasized the need to repair and protect aquatic habitat along Jenkins Creek. Daylighting Jenkins Creek occurred in 2 phases at 2 locations: an 800-foot-long channel in the Lake Wilderness Golf Course and a 700-foot-long channel in Lake Wilderness Park (which ran previously underneath a parking lot). An additional 500 feet of existing surface stream was also restored in this phase.

Both phases required the recreation of a floodplain and designing extra flow capacity into the stream channels themselves, in anticipation of future watershed development. Other ecologically-base structures included bioswales that were put in place near roads and parking lots to intercept pollutants and sediment, and a berm designed above the golf course floodplain to camture nutrient-laden runoff. Gravel bars placed in the creek to divert flow during construction were allowed to remain in place and supply materials to the new streambed.

Extensive public meetings were conducted during development of the overall watershed management plan, including two public meeting just for daylighting Jenkins Creek. After completion, a public education campaign was undertaken in single-family neighborhoods near Jenkins Creek to teach homeowners proper maintenance practices along the newly restored stream corridor.

E. Creation of Outdoor Classroom / Campus Amenity

"The Dell", University of Virginia in Charlottesvile, Virginia

In this case, the goal was not to restore a fully-functioning stream ecosystem so much as it was to reclaim the history of the site as a former stream corridor and pond. In so doing, architects, stream specialists, and engineers aimed to capture sediment and partial flood waters that might otherwise end up downstream, while providing a newly defined community space on campus that brought people in closer contact with the natural settings surrounding the university. By allocating nearby ball fields as floodplains and creating a large sedimentation basin surrounded by native riparian plantings, designers successfully restored the importance of water in the most urban settlings and reversed the loss of "cultural space".

III. Residential Daylighting

A. Compiling of different ideas and alternatives from student in GI class and Doug's class

West Ox Pasture Brook in Rowley, Massachusetts.

Ox Pasture Brook flows through the William Forward Wildlife Management Area (owned by the Division of Fisheries & Wildlife) in the Town of Rowley, Massachusetts. This small coastal stream is a tributary to the Mill River, which ultimately drains to the Parker River National Wildlife Refuge. Currently, a small and partially collapsed dam located at the 'head-of-tide' (where freshwater meets the tidal influence of the sea) negatively impacts the stream in a number of ways, including blocking upstream fish migration, degrading water quality, and preventing natural hydrology from shaping and maintaining riverine and wetland habitat.

But things are about to change for the better. Working with a variety of partners (e.g. NOAA, USFWS, MA Division of Fisheries and Wildlife, American Rivers), the Division of Ecological Restoration (DER) will remove the old stone and earthen dam later this fall. The project will restore diadromous fish passage (i.e. rainbow smelt, American eel), enhance fish habitat for resident and diadromous species, improve water quality, restore natural riverine and inter-tidal processes (e.g. flow, sediment movement), and allow the formation of natural brackish areas and tidal and/or freshwater wetland communities.

B. Projects existing on campus concerning stormwater management

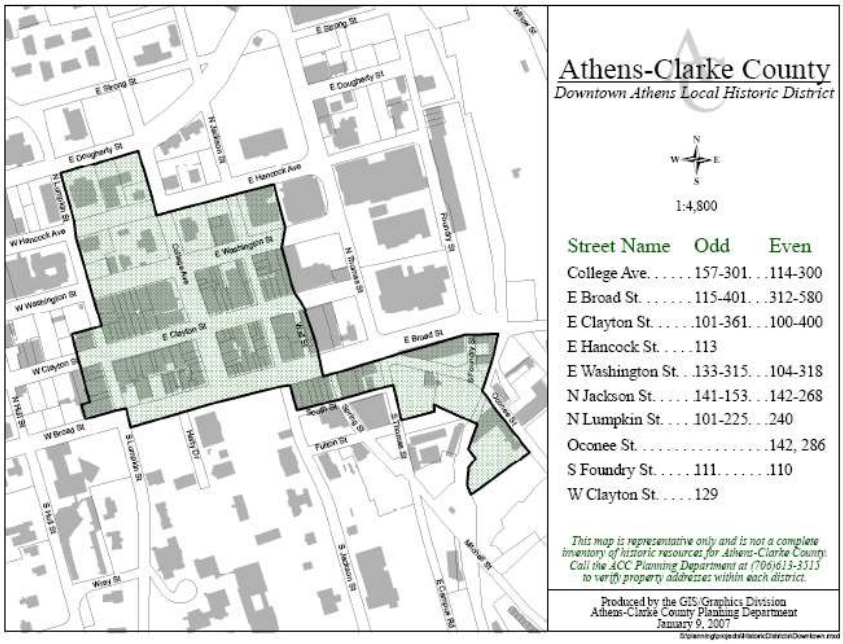
See Appendix 3

Part 2: History (Stephanie Goodrich and Sarah McQuade)

I. National Register of Historic Places / State Register / Local Historic Designation

A. Possible expansion of the existing district

It is worth considering that the National and Local Historic district boundaries be expanded to include the entire project area. There are precedents in Eureka Springs, Arkansas and Berkeley Springs, West Virginia to include the area of town springs due to their close association with the urban landscape and the planning of the town.
In Athens, the National Register and local historic districts have the same overlay. (Reference pdf)



Either or both of the Local or National Register historic districts could possibly be expanded to include the entire spring project area or at least the area where the spring originates.
The former mill at the end point of the spring, The Athens Cotton and Wool Factory, is already on the National Register of Historic Places and would make an excellent boundary to the new district footprint if enlarged to include the entire area. (http://georgiainfo.galileo.usg.edu/Athens_Factory.htm)
The downtown historic district is significant under National Register Criteria in the areas of architecture, commerce, community planning and development, and ethnic heritage-Black. The town spring is also significant in those areas, especially community planning and development.
The founding of the University of Georgia closely relates to the Athens Town Spring location and in the Annals of Athens, Georgia, 1801—1901, Augustus Longstreet Hull makes mention of the spring and its importance to the selection of the site as the future home of the University of Georgia:
"The site of the University is on the South side and a half mile from the river. About 200 yards from the site, and 300 feet above the river, in the midst of an extensive bed of rock

issues a copious spring of excellent water, and in its meanderings to the river several others are discovered."

B. Similar National Register listings

Eureka Springs, Arkansas:
This entire town, Including the Healing Spring, is designated on the National Register. (http://www.cityofeurekasprings.org/city-history.html)

Figure 1: Harding Spring in Eureka Springs Arkansas (From http://en.wikipedia.org/wiki/File:Harding_Spring_in_Eureka_Springs_Arkansas.jpg)

Eureka Springs Historic District:
The entire town of Eureka Springs is listed on the National register of Historic Places and includes the "Great Healing Spring" that the ancient legends of several Native American tribes spoke of in what became Eureka Springs, where the numbers of afflicted seeking cures transformed a wilderness area into a flourishing city in 1879.

Berkeley Springs Historic District in West Virginia:

Another example of a town spring and its association with a historic district is Berkeley Springs Historic District in West Virginia (http://www.bathhistoricdistrict.org/about.html). It is a locally and Nationally Designated Historic District.

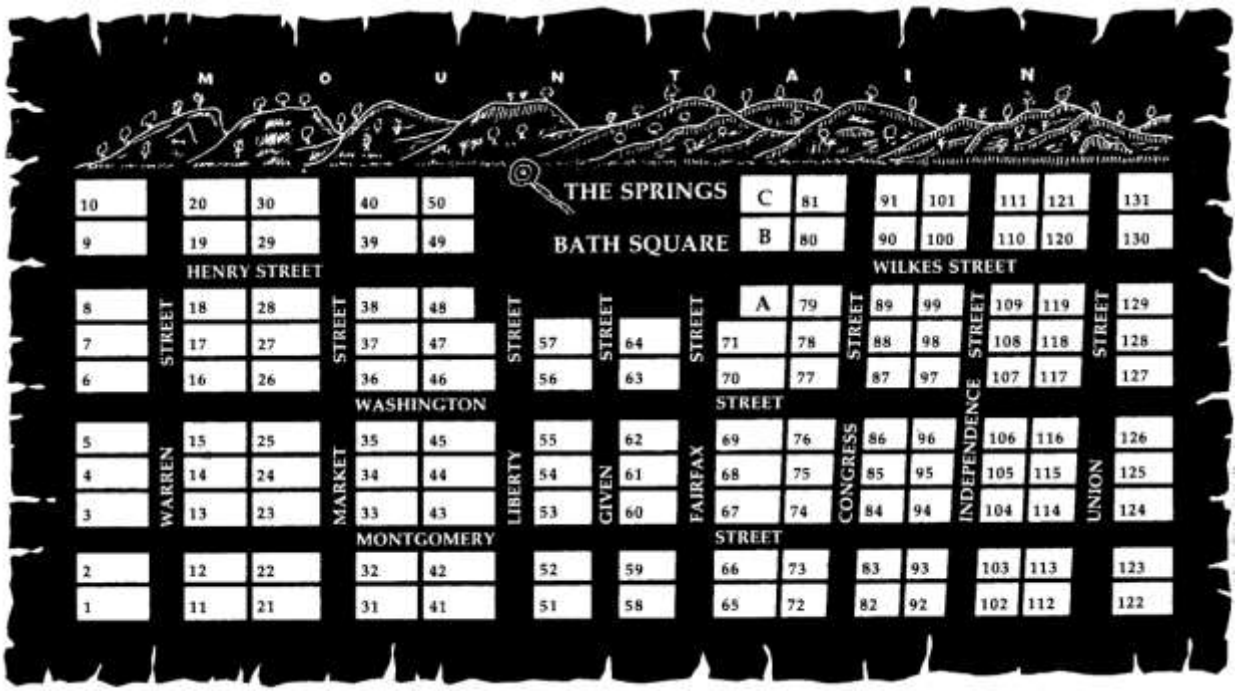


Figure 2: Berkeley Springs West Virginia Historic District including the Natural Spring (from http://www.bathhistoricdistrict.org/about.html)

"Berkeley Springs, a fountainhead of warm mineral waters frequented by Native Americans long before Europeans arrived in the New World, are at the heart of a mountain spa community in West Virginia's Eastern Panhandle. First noted as Medicine Springs in 1747 on a map drawn by Thomas Jefferson's father, the waters for many centuries have drawn visitors seeking health and relief from the stress of everyday life.
In 1776, George Washington's family and friends drew up a plat of 134 lots, named the streets, and incorporated The Town of Bath, invoking the muses of the renowned English spa. Yet the magic of the springs prevailed, and the town and surrounding area are known by their name -- Berkeley Springs." (from: http://www.berkeleysprings.com/history.htm).

In Athens, the Town Spring was also a main factor in considerations for the location of the University of Georgia. "The square of the University containing 36^ acres is laid off so as to comprehend the site, the houses and the spring. A street is laid off upon the northern line of the square adjoining a village of lots in that direction. Besides the spring in the square, which is convenient to the village, there is one in the street and another back of the lots." (from The Annals of Athens).

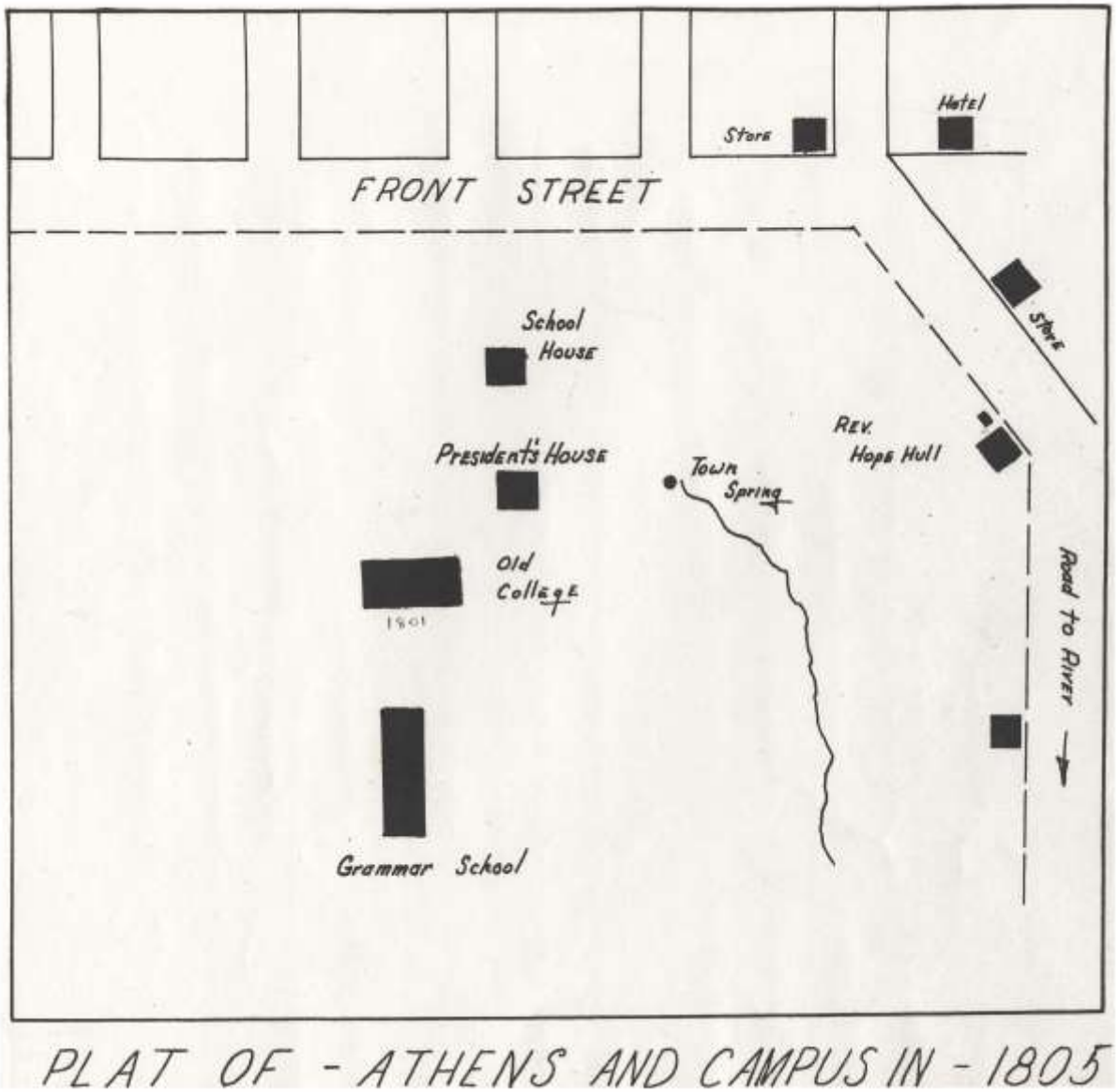


Figure 3: 1805 Map of Athens

C. Intangible heritage in Australia

The Value of Intangible Historic Heritage:

Cultural landscape management and the values that we derive from such sites are assessed in a variety of ways. Our individual perceptions of the sites, the value of the use of the site, cultural and religious beliefs, value from social interactions and other intangible values being among the means with which we decide the value.

In Australia, "sacred sites are irreplaceable heritage places for Aboriginal custodians and all Australians. They are an intrinsic part of a continuing body of practices and beliefs emanating from Aboriginal laws and traditions. Sacred sites give meaning to the natural landscape. Sometimes sacred sites are obvious, such as ochre deposits, rock art galleries, or spectacular natural features. In other instances sacred sites may be unremarkable to an

outside observer. They can range in size from a single stone or plant, to an entire mountain range." (From aboriginal Areas Protection Authority: http://www.aapant.org.au//files/sacredsites/registration.html)

Shield trees are an example of a protected resource that is a living thing. Large swaths of bark would be cut from the tree to make a shield, leaving behind a scar.

Figure 4: Shield Tree in Bullawaring State Park, Heathcoat National Park, Australia

A formerly obscured, but nevertheless important feature in Athens is the old town spring. The current interpretation includes the exposed railroad track that once fed into the warehouse district.

Figure 5: Restored section of spring with railroad tracks

Movable and ecological objects such as a stream can be considered for inclusion on the Historic District overlay zone when of such importance to the evolution of the town and landscape.

II. Archaeology

A. Who was here and when?

Historic background of the area:

The Native American culture of northern Georgia from B.C.E. 1000 until European expansion into the area was in the form of chiefdoms. In this period, Clarke County was part of a chiefdom that has its capital in Scull Shoals, in present day Greene County to the south of Clarke. Most of the citizens of this chiefdom would have lived within a few miles of that capital, using Clarke County mainly as a hunting site. (Frances Taliaferro Thomas, A *Portrait of Historic Athens and Clarke County*, University of Georgia Press, Athens, 1990.) The Oconee River (Oconee being a native American word for river) was a dividing line between the native Creek and Cherokee Indian tribes that were often at war with each other. Colonial expansion occurred in north Georgia since the creation of Georgia as a colony in 1732, but the area that would become Athens was opened up for full European settlement in 1783, after the Revolutionary War, when the State of Georgia would sign a treaty with the Cherokee to clear all of their debts in exchange for lands west of the Oconee River.

From the Downtown Athens National Register of Historic Places Nomination form: "In the area of community planning and development, the district is significant for the development of downtown Athens from the selection of the site for the University of Georgia in 1801 (at which time the location was named Athens) to the middle of the 20th Century. The historic district represents Athens' early growth during the early years of the University of Georgia…" "Athens gradually became an important market town and a number of cotton mills and warehouses were constructed in the area."

"By 1860 downtown Athens had become a busy commercial and industrial center… Athens had become northeast Georgia's center for railroad shipments during the 1850's as well. Farmers from throughout the region came to Athens with wagon loads of goods for shipment by rail to Augusta and elsewhere."

The spring itself has been modified through time to be only partially exposed in the current restored area and in the area south of the railroad track and north of Williams Street.

B. History and Lifestyles

C. What has been found in the area?

III. Overlay of Cultural patterns

A. Sanborn maps transposed onto grid of each of the 3 solutions

IV. Interpretation

A. South part of the site: Mill area

Southern part of the site:
The Athens Cotton and Wool Factory is situated near joining of the spring and the Oconee River. This National Register building began use in 1829 as a cotton and wool processing plant and subsequently, a mill village was built up around the area to the north of the river. The mill was in operation for 97 years until it was closed in 1926. In addition to the Mill village, there was the Saint Mary's Episcopal Chapel on Oconee, where the former steeple remains. This area was integral to the development of the commerce and rail lines of the northern part of the site.

Figure 6: Former mill house fireplace on Oconee Street

Figure 7: Saint Mary's Episcopal Church Steeple on Oconee Street

B. Northern part of the site: Railroad and commerce

Cotton warehouses and industry aligned with the railroad once dominated the northern area of the site.

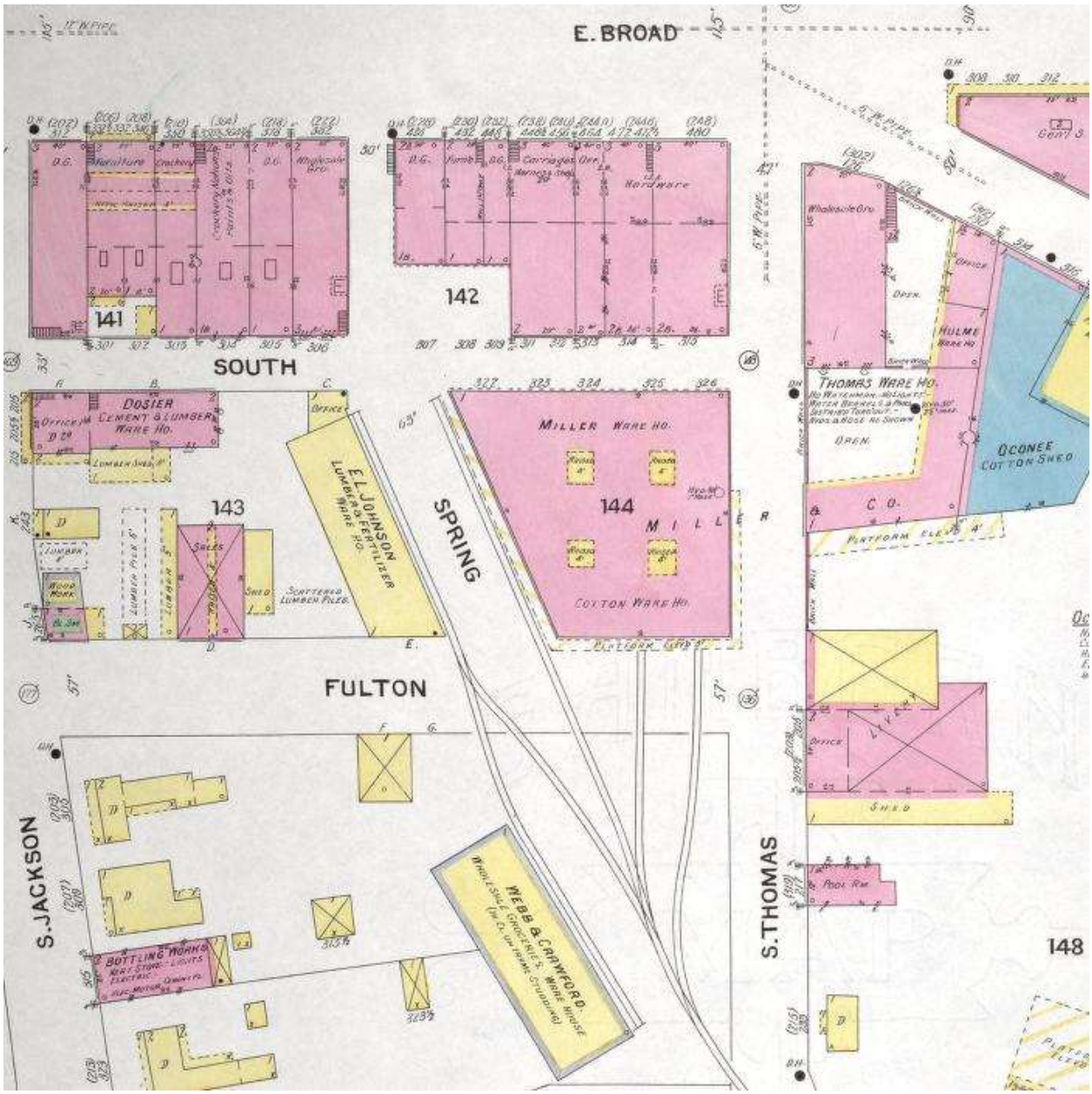


Figure 8: 1908 Sanborn map of northern spring street site

This portion of the site is historically important in the history of Athens as part of the warehouse and commercial zone and the development of the character of this area.

Methods that can be used to interpret this site can include signage, pod-casts of the history of the area and Augmented reality functions.

Figure 9: a historic photo superimposed on a London Building (**http://www.petapixel.com/2010/05/24/museum-of-london-releases-augmented-reality-app-for-historical-photos/**)

The Museum of London has created an iphone application, Streetmuseum, which allows the application to recognize the GPS location and overlay a historic photo over a live feed.

Suggested visuals:

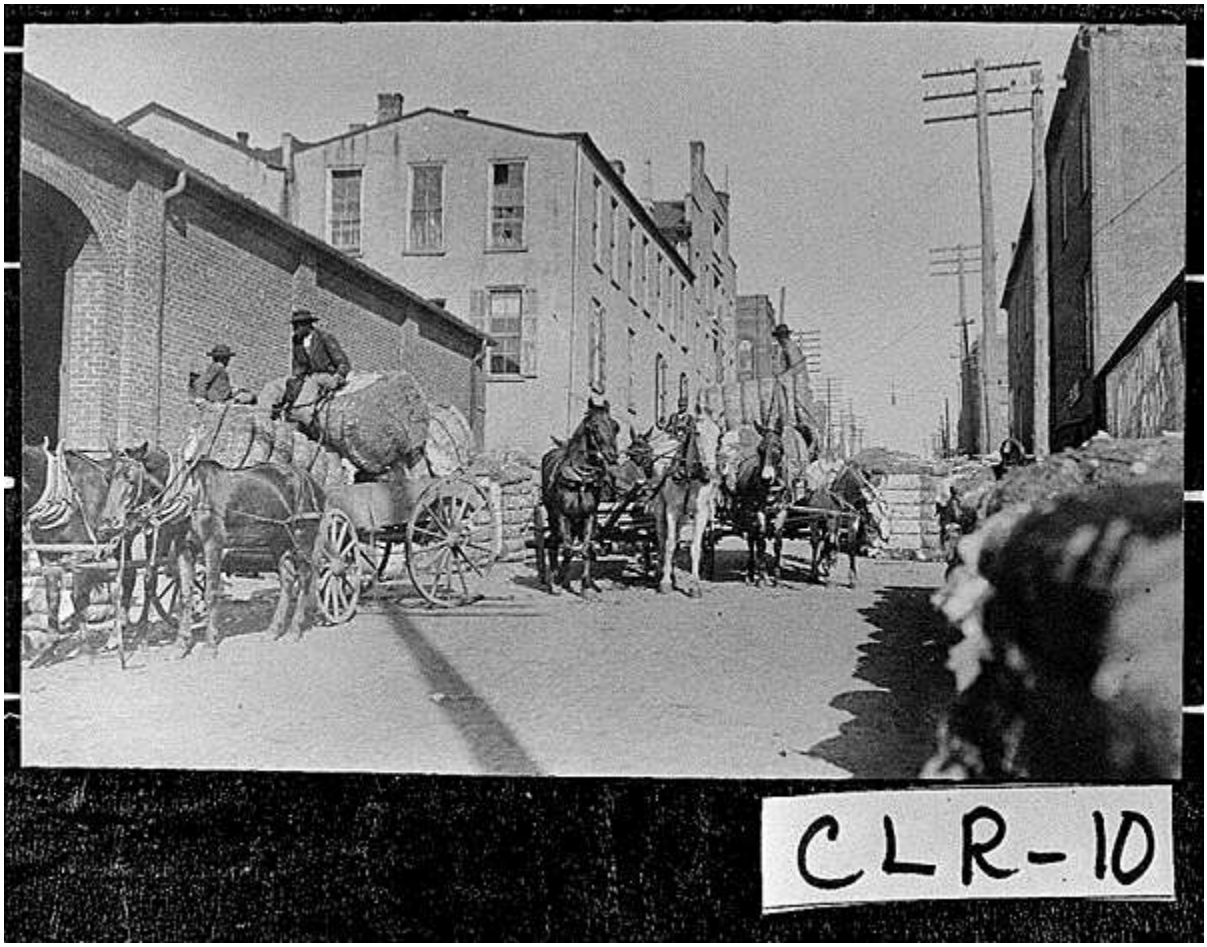


Figure 10: Thomas Street c. 1912 looking north (http://dlg.galileo.usg.edu/cgi/vanga?userid=public;dbs=vanga;ini=vanga.ini;action=retrieve;format=_contact;grid=3;rset=010;recno=32)

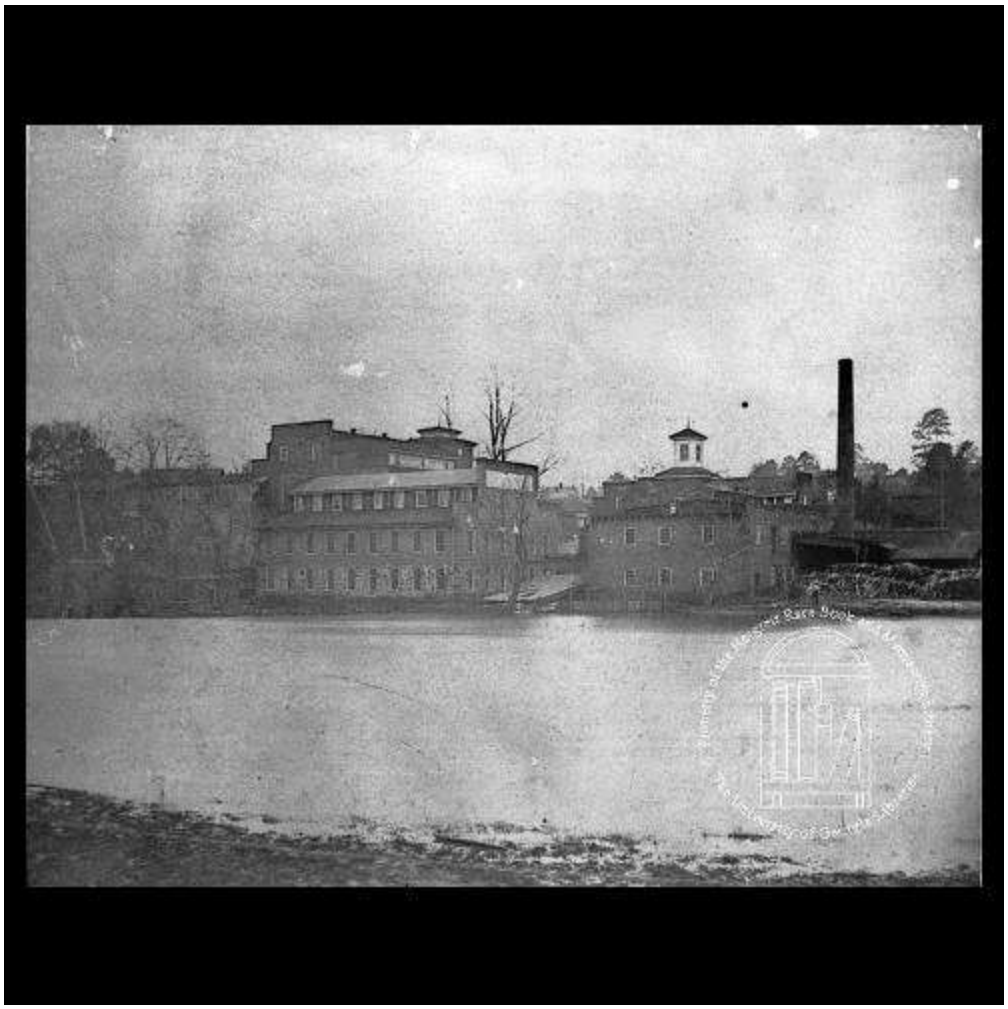


Figure 11: Athens Factory
(http://www.libs.uga.edu/hargrett/selections/athens/athens_rev.html)

Photographs of typical mill houses could be superimposed over the historic chimneys or any of the remnants that remain in the area, as well as the rail road track line and patterns of development.

There are programs that coordinate your GPS location with features around you such as retail locations, transit and sites of interest. Applications like this will help a visitor find their location, navigate the site as well as giving a historic example of the site.

Figure 12: Heads up navigator screen shot (http://itunes.apple.com/us/app/heads-up-navigator-pro-3d/id330368224?mt=8)

Part 3: Site Considerations (Stuart Jones and Anna Gore) (text diverges significantly from outline)

I. Energy and Efficiency

A. Site – Gravity, don't fight it.

- Incorporate native plants into the landscape
  - See appendix for plant list created by CED Landscape Ecology class
  - Deciduous trees along sidewalks would provide shade in the summer and sunlight in the winter
- Storm water Management
  - *Case studies and summary of work done thus far provided by Kuo and Yuan*

B. Buildings – LEED, EarthCraft, Passive House, High Building Standard

All buildings should adhere to high standards, such as LEED, EarthCraft or Passive House standards. These standards will ensure that building practices consider environmental concerns such as:

- Water reuse
- Energy Efficiency
- Building material reuse
- Geothermal potential

C. Transportation

Site connectivity and access to transportation choices should be considered, specifically:

- All paths should be bike and pedestrian friendly
- Bus and/or rail line access points should be located within the site
- Efficient parking sites or structures should minimize lot footprints

II. Circulation and Safety

A. General traffic flow and connectivity – Plan View – Illustrator over Aerial (Bing)

<u>Interpretation of Site Circulation on three proposed plans:</u>

All of the proposed plans included closing Spring Street between South and Fulton Streets and creating a pedestrian walkway with surrounding green space at or near the origin of the spring. The plans also incorporated pedestrian access to the stream corridor, although they differed in how that access was provided.

Economy Group Diagram Clarification:

- Close part of Spring Street
  - From South Street to S. Thomas Street
  - Increase safety of pedestrian crossing from the corner of Mitchell Street to the parking deck & entrance to Campus
- Create a new road from Mitchell Street to Oconee Street
- Provide safe and direct bike & pedestrian access from Downtown to the Oconee River
  - Crosswalks required at Fulton, Thomas and Williams Street
  - Train track crossing required

Social Group Diagram Clarification:

- Close all of Spring Street
- Create a new road to connect Oconee Street and S. Thomas Street
- Close Part of Mitchell Street
  - From S Thomas Street to the proposed new road
- Provide Safe and direct bike & pedestrian access from Downtown to the Oconee River
  - Crosswalks required at Fulton, S Thomas, Williams and the proposed new road.

Ecology Group Diagram Clarification:

- Close Part of Spring Street
  - Between South Street and Fulton Street
- Access to the stream corridor is provided from several locations
  - No direct access from downtown to Oconee River through the stream corridor

B. Safety – Sections as needed for typologies – Illustrator

- Traffic Lights
  - Location of traffic lights should be re-evaluated due to changes in street connectivity
- Increase crosswalk signage and visibility
  - Specifically at the corner of Mitchell Street and S. Thomas Street

C. Additional Considerations

Connectivity to the Greenway

Expanding the bike & pedestrian paths, illustrated in the Economy and Social Group Diagrams, across the Oconee River would provide a connection from Downtown Athens to the Greenway. This could be done in the form of newly constructed bridge or by providing connectivity to the Oconee Street Bridge.

III. Topo Section and Analysis (Darren Zhang)

IV. Link to GI Plan (Stuart Jones)

Part 4: Architecture (Carol Flaute and Deepali Pavnaskar) (no text provided, outline only)

I. *Gather photos of case studies/inspirations for all three types of development (Traditional warehouse/industrial, contemporary/experimental, mixture of both) + retrofitting existing buildings + public art*
II. *Identify existing building styles and relationships (tanner, parking deck, nuci's space, downtown, existing buildings within site, rem steeple, etc.)*
III. *Describe architectural character of spaces (height, massing, spacing, etc.)*
IV. *Identify transition zones and transition elements*
V. *Character of public art for various functions. Consider historic role of spring house, other possible functions of public art*

Part 5: Environmental Graphics and Wayfinding (Elizabeth Brighton & Darren Zhang)

I. Environmental Graphics / Wayfinding

a. Indianapolis
   - The goals of the "Direction Downtown" wayfinding system were:
     - To identify downtown as a destination from the Interstate highway system;
     - To enhance downtown's public image through unique, helpful graphics;
     - To better organize and present information about downtown destinations to make them easier to find;
     - To simplify traffic patterns by guiding drivers through downtown along specific routes;
     - To identify public parking;
     - To create ongoing policies for signing venues for traffic and pedestrian use.

b. Siena, Italy
   - Commercial signage: placed carefully with the details of the architecture, does not disturb pedestrian view
   - Canvas panels: elegant series of canvases that are simple in color and placed in such a way that when viewing directly from the front, the signs disappear.
   - Signage system: for historic towns that attract a lot of visitors, signage should "inform the viewers without blocking vistas, to inform without being prominent" (Machado, 2001)

c. Atlanta= What we DO NOT want- Text on top of a pole

   i. 

d. Alexandria: http://alexandriava.gov/Wayfinding

   - Develop a vehicular and pedestrian wayfinding system for destinations throughout the City with a focus on the Old Town core of the City;
   - Develop a wayfinding system that will create an overall identity for the City, that is compatible with its historic character, and that will also help to differentiate existing and emerging districts;
   - Provide signage that will direct visitors to parking lots and garages;

- Provide trailblazer signage for interstate, state roads, and primary bicycle trails, as well as major destinations just outside City boundaries (Ronald Reagan Washington National Airport, Mount Vernon);
- Reduce visual clutter and increase consistency of City signage;
- Promote walking, bicycling, and use of mass transit;
- Support the developing regional interpretive trail system and reinforce historical and regional trail themes by incorporating regional trails and historic sites into City interpretive signage;
- Integrate Alexandria Heritage Trail interpretive signage (designed previously and partially installed); and
- Address ADA guidelines and considerations in the design of the program.

e. Zeche Zollverein: Essen, Germany http://www.segd.org/#/design-awards/2008-design-awards/zeche-zollverein-wayfinding.html
   i. The system uses a wide variety of tools to aid wayfinding, from human beings to sign panels, cast-iron miniature models, maps, ground markings, lighted panels, and printed media.
   ii. Pavilions at the park's entrances house 3D, 1:715-scale steel models of the entire area, providing topographical reference. Printed maps and ground markings lead visitors to specific buildings or sites, where more miniature models provide building and site details.
   iii. 
   
   -Example of Mini 3-D Model Example of larger 3-D model
f. Do we want an organized color-coded system like in L.A.? http://www.segd.org/#/design-awards/2007-design-awards/downtown-los-angeles-walks.html
g. Campus wayfinding @MIT: http://www.segd.org/#/design-awards/2002-design-awards/mit-wayfinding-signage.html
h. Precedent of Criteria for places that qualify for signage
   1. "Direction Downtown"-Indianapolis,IN- Criteria for Venues:
   - Venue must be open to the general public and be of interest to the leisure traveler.
   - Venue must be publicly owned, not-for-profit, or have significant public money invested.

- Venue must be located in Regional Center or be defined as a Regional Center destination.
- Venue must have street level visibility and on-street building signage.
- Venue must meet the following minimum annual attendance requirements:
    - Category 1, a venue with more than 750,000 visitors annually, documented with gated or ticketed visitor numbers, will receive sign support beyond the Quad in which it is located.
    - Category 2, a venue with more than 25,000 visitors annually, documented with gated or ticketed visitor numbers, will receive sign support within Quad.
    - Category 3, a venue with less than 25,000 visitors annually, will receive local support at points where making a turn for the facility is a final decision and when space is available on a sign.
    - Category 4, a venue with more than 750,000 visitors annually outside of Regional Center and within Marion County, may be signed as leaving Downtown.
- Public parking must be available nearby.
- New venues will be categorized by submitting a business plan of attendance projections.
- Business plans and attendance documentation may be audited for up to two years.
- Venue should have funds available to participate in an annual maintenance assessment if deemed necessary by the City of Indianapolis and Indianapolis Downtown, Inc.

II. Should the signage be part of the citywide wayfinding effort?

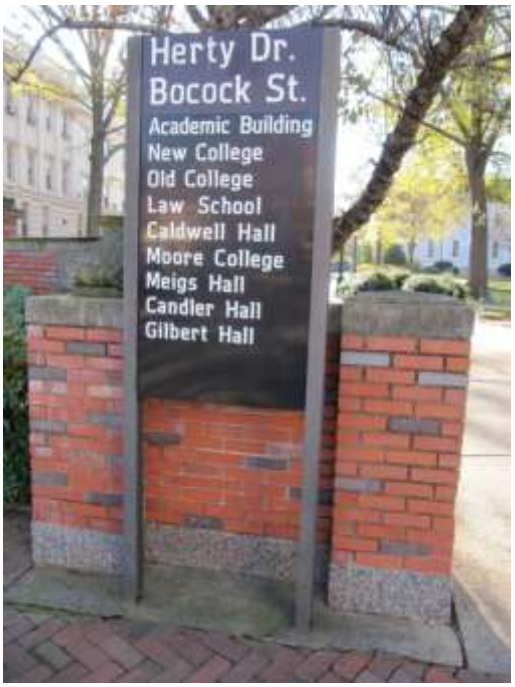
a. A wayfinding program unique to Athens should be considered in Athens' upcoming Downtown Masterplan.

III. Study of existing signage in downtown and campus

University Sign on Broad (sign standard typ.)

Signage for Classic Center on Broad

Existing Athens Bus Stop Signage



Standard UGA Signage for Herty Drive Bldgs

Sign on corner of Broad/College - Example of Athens' funky style - is this showing the public's desire for different signage?

Sign for Athens Welcome Center- really?? On E. Broad

Existing City Hall Signage

Example of Existing ACC signage

Historically, Athens has had really kooky signage(aka in weird places all shapes and sizes…can there be a wayfinding system that still keeps the kooky character? Maybe not so much color coordinated but signs that would speak to the different building uses that they referenced without seeming fake/Disney-like?

IV. List of places in Athens that could benefit from a citywide wayfinding system:

- Welcome Center-aka **Church-Waddel-Brumby House**
- **Taylor-Grady House**
- **T.R.R. Cobb House**
- **Ware-Lyndon House/ Lyndon House Arts Center**
- City Hall
- Georgia Museum of Art
- Georgia Museum of Natural History
- Parks?
- Town Spring
- Tree that Owns Itself?

V. *Examples of Athens Clarke County "Branding":*

a. Taken from ACC Planning Department

Image copied from: http://www.accplanning.com/corridorstudies.php

b. 

ADDA website image

VI. *Signage specifics*

A. What should the signage look like? We would recommend for it to depart from the UGA standard black/brown sign with white writing

i. Possible interactive signs- aka signs that kids can make rubbings on or signs that change depending on what part of the site they're in- the environs will inspire the sign but not in a kitschy way

1. http://de-war.de/eurekacarpark.html

(above) Done by Emery Studio In AU- Eureka Carpark in Melbourne- example of how signage could also be public art.

ii. 


Interactive sign (pencil rubbing) Luminous sign for night


Multi-use sign (Attached to a bus stop sign, functions as sign and seating)


Signs interactive with surrounding environment (Hollowed-out so it changes when looked from different locations, and varies in height to respond to the surrounding vegetation)

iii. Signage can be on the ground plane as well (example "City Carpet" in Boston)

City Carpet in Boston

Plant Print in Concrete

Example of Wayfinding via the ground plane done by Darran

VII. Public Art

A. Examples of Art

i. (Boston) Timeline of Naval Ship Types Through History in cast iron

ii. History of Boston's Rail Line told through mini 3-D bronze model

B. Work with architectural group to determine style of art within site

i. Examples of Historical Industrial Signs:

Colgate Factory- NY

Ford Motor Company

Part 6: Partnerships Considerations in Policy (Lilly Agel & Heath Tucker (text diverges from outline)

I. Precedents in Policy – between public / private / university

Teamwork—collaboration between the University of Georgia, Athens-Clarke County government and independent entrepreneurs—will make the Town Spring Development successful. We envision a new kind of partnership where unique policies collect the responsibilities and resources needed to achieve the goal.

Why encourage partnership?

Business relationships in the 21st century are becoming increasingly complex. Investments are riskier post 90s era business boom. Projects are less likely to be funded by one single source, and companies are more likely to work together to achieve common interests.

Athens-Clarke County and the University of Georgia generate and receive wealth and ideas from a wider population than ever before. They have a greater responsibility to the success of the other; neither is dominant. *The University of Georgia supplies the density and volume needed to support the entrepreneurial spirit of downtown.* Rapid student turnover and a buffer from local politics give UGA the power to quickly implement change. *Athens-Clarke County regulates the culture that brings 35,000 students to Athens and makes the university successful.*

Partnerships between public and private organizations are still rare, but we do have precedents, in Athens and around the nation.

A. In Athens:

i. Lumpkin Street Rain Gardens—Lumpkin Street, one of the busiest thoroughfares cutting across campus, experienced serious floods with every rainstorm. While adding a new stormwater pipe system, ACC and UGA partnered to build a series of rain gardens along Lumpkin Street. These rain gardens capture the first inch of rainfall (and the street's pollutants), infiltrating and cleaning the water before it empties into Tanyard Branch creek. *ACC paid for the rain garden construction and UGA donated land and agreed to maintain the gardens*. This solution seems simple three years later, but in 2007, the Lumpkin Street Rain Gardens were a social, economic, and environmental novelty.

ii. Lumpkin and Clayton Parking Deck—*An ACC/private investor partnership to build a money-making parking deck with office and retail space* on a surface lot in downtown Athens

B. In the nation:

i. Neighborhood Rehabilitation in Beall's Hill and College Hill in Macon—A neighborhood revitalization program supported by endowments from the Knight Foundation Program for Community Building, Mercer

University and the City of Macon working together to repopulate the historic neighborhood between Mercer and downtown. The Beall's Hill program has three remarkable and pertinent details. First, Mercer's students are directly involved in the planning and advocacy of Beall's Hill. Second, Mercer University contributes a large chunk of money to upgrade privately owned homes outside of the University's jurisdiction. And finally, the masterplan and community directives stem from a public charrette.

II. Spring Protection in perpetuity

A. Something like a land trust to protect the Town Spring's (proposed) design and character from future political agenda, i.e. how to protect the Town Spring from future, more conservative ideas, so that it can't be forced into a traditional quad.

As a part of Athens' heritage, the Town Spring deserves protection as it is daylighted. We would like to recommend a special designation for this very special creek. Ideally, the University would permanently give up development rights in the stream buffer, granting a third party the power to protect the creek into perpetuity. The Town Spring becomes a living memorial, a flowing time capsule, highlighting all of the choices that define the University and Athens—the site's history, today's attention to sustainability, and the University's commitment to the future.

What is a preservation easement?

"The term "preservation easement" is commonly used to describe a type of conservation easement – a private legal right given by the owner of a property to a qualified nonprofit organization or governmental entity for the purpose of protecting a property's conservation and preservation values." (http://www.preservationnation.org/resources/legal-resources/easements/easements-faq/what-is-an-easement.html)

"Preservation easements are conservation easements whose principal purpose is to protect a property with historic, architectural, or archaeological significance, although the easement may also protect natural land values as part of a property's historic setting."

"Typically, preservation easements address five basic issues: (1) What physical features of the property are covered by the easement; (2) What activities by a property owner that could damage or destroy significant historic or architectural features are absolutely prohibited; (3) What activities are allowed, subject to the approval of the easement-holding organization; (4) What activities are permitted by the owner as a matter of right; and (5) what type of affirmative maintenance obligations are required to be undertaken by the owner. The easement will also address other "boilerplate" issues, such as insurance, public access, amendment, and casualty damage."

Information from:

http://www.preservationnation.org/resources/legal-resources/easements/easements-faq/what-is-an-easement.html

A. Precedents for Preservation of the Town Spring

1. Sandy Spring, Sandy Spring, MD. A one-acre parcel under the management of Greater Sandy Spring Green Space, Inc. *A spring on this site has been successfully preserved in perpetuity due to its historical significance to the community that arose around the site*. This precedent shows mechanisms for protecting a natural feature due to its significance as a feature in the cultural landscape of the community's formation.

    - This site is dedicated to the past, present, and future residents of Sandy Spring in hopes the activism that has characterized the community for centuries will continue in the future. This spring has long been a source for contemplative thought and a place to recognize that we are dependent on this land and should be watchful caretakers.
    - http://www.sandyspringgreenspace.org/about.htm (301-869-5358)

2. Big Trees Forest Preserve, Sandy Springs, GA. Perpetual protection for this site derives from a conservation easement for part of the site in cooperation with the City of Sandy Springs, who is the primary owner of the entire parcel. The remainder of the site, the state-owned portion, is becoming a "Heritage Preserve," as designated by the State of Georgia. *This example shows two possible mechanisms for preservation; one for land under city ownership and one for land under state ownership.* If the Town Spring site becomes a city/university joint venture, this precedent may be of use.

    - The Board of Directors is dedicated to *preserving the Forest and its natural resources with a conservation easement* on the 20 acres owned by the City of Sandy Springs. The 10 acres owned by the State of Georgia is pending *preservation status as a "Heritage Preserve" by Executive Order of the Governor*. These legal designations will preserve and protect the entire Forest in perpetuity. Land is held by Big Trees Forest Preserve, Inc., (770-673-0111, http://www.bigtreesforest.com/contact.htm)

B. Policy Recommendations for Perpetual Town Spring Preservation

1. Pursue perpetual protection for the Town Spring as a state Heritage Preserve site.
    - Heritage Preserve status is currently available under the Heritage Trust Act of 1975 for sites managed by the Department of Natural Resources.
    - Forest Heritage Preserve status is currently available under the Forest Heritage Trust Act of 2004 for sites managed by the commission for the Forest Heritage Trust Program.
    - Pursue a method for protection of important sites currently under the management of state universities based on the model acts listed above.
    - An example of an executive order establishing a Heritage preserve site can be seen at http://www.georgia.gov/gov/exorders/2004/jan/01_21_04_04.pdf

2. Pursue perpetual protection for the Town Spring as a part of a partnership with the Athens Land Trust.
    - En example of publicly owned land under a conservation easement with a land trust can be seen at the Durham River Park in Durham, Maine. (http://www.androscogginlandtrust.org/land_projects/Easement/16-durham-river-park)

III. Retail/Cultural, Amenities in Town Spring Development

America has a long history of required amenities in new private development: sewer systems, parks, public art, parking spaces and sidewalks. The University of Georgia has the resources and control needed to achieve even higher standards. What kinds of public amenities and retail options should UGA be required to add with new, money-making development in the Town Spring?

A. Outdoor performance space—*UGA has the land, and the community needs the service*, both to improve quality of life for its residents, and to bolster the downtown music economy. An outdoor amphitheater could follow the familiar town and gown partnership seen in the Lumpkin Street rain gardens; *UGA can supply land, ACC can pay for the construction, and UGA can provide long-term maintenance*. Both the university and the community contribute resources, and student life and local economy benefit.

    - The Town Spring Development's location on the cusp of campus and downtown positions an amphitheatre to become *the link between the University and other music-driven initiatives in Athens.* UGA's Music Business School can relocate to a new facility in the Town Spring Development and reap the benefits: the encouragement and guidance of nearby music venues, outdoor music festivals like AthFest, and the music incubator Nuci's Space.
    - Currently, Athens is one of the three cities bidding for the Georgia Music Hall of Fame; there is no better site, and no more appropriate town. *Performing student musicians, the future of the music industry, can make music in the inspiring silhouette of music's success stories.*

B. Grocery store—A quick google search for "campus grocery store" will show you that UGA isn't the only university without a nearby grocery store, but that doesn't mean our university should ignore the problem too. *The density of campus could become the determining factor in the success of a grocery store, especially if the university accommodates the living preferences of its graduate students and professors. And, a campus/downtown grocery store would make many nearby neighborhoods truly walkable.*

    - Like restaurants, grocery stores make an easy profit on alcohol sales, but Georgia's blue laws make it illegal to sell alcoholic beverages within 300 feet of a school (but not to serve, making bars next to campus perfectly legitimate). The new Trader Joes purportedly looked at a downtown option, but limits on alcohol sales (and I suppose parking issues) sent them to Oconee County. This makes sense: According to one of the managers, alcohol sales make up 12-26% of gross weekly sales at Trader Joes across the nation. The new Athens chain expects about 14% as the market steadies over the next year (which estimates to $50,000 gross income per week). EarthFare in Five Points only expects beer and wine to

contribute 3-4% to the store's gross weekly sales. The EarthFare manager believes Trader Joe's reputation for cheap wine contributes to dramatic sales figures.

- *Obviously, amending Georgia's blue laws would be the easiest, and most unlikely, way to fix our grocery woes. Alternatively, the University could agree to support a private grocery store, building a creative and successful business model.* The university has the resources to offset alcohol profits with reduced rent and student services; this grocery store could function as a co-op learning/profit-making venue, with business students learning from internships on the board, public relations students organizing the advertising and agriculture students selling beef and seasonal produce to complement the grocery store's offerings. Combine the university/private partnership with a large selection of profitable prepared foods and snacks catering to the crowd that wants good food quickly, and a grocery store will be ready for business.

C. Museum—An attraction like *a museum will thrive on the downtown energy and visibility, but also draw people to the downtown shops and eateries*. The State Natural History Museum is in Athens, hidden in a basement on South Campus. Students like us have lived in Athens for years and have never even heard of the museum! The Natural History Museum needs a home, and the Town Spring has natural history worth celebrating.

- Resources and Additional Information:
- Link to an in-depth UPenn study about university/city partnerships, especially socially-conscious housing, education, health parnerships -- http://docs.google.com/viewer?a=v&q=cache:JEr4lZAKc6QJ:students.wharton.upenn.edu/~mih/myresearch/University%2520Community%2520Partnerships.pdf+university+of+pennsylvania+community+university+partnership+philadelphia&hl=en&gl=us&pid=bl&srcid=ADGEESg397WCY0xh7_rquJcgMwkF6FM1Rz3UdFKrhS9DAevB8vUW-GZ-JQ6T-FsYictI18WUup8wwbOZ3m0FXGq25hIbOIUvRLf9_ax6spItO6UNkPK1DJJM4RY61PTxVsb_mmwchzK-&sig=AHIEtbQzcDsA53VDN03Oyy24MmBqrg9BcA
- Bealle's Hill http://www.collegehillmacon.com/index.php?option=com_content&task=view&id=13&Itemid=28
- http://www.11thhouronline.com/index.php?option=com_content&view=article&id=309:the-pheonix-in-our-midst&catid=76:city-scene-columns&Itemid=57