

VISION

HURT & PROFFITT, INC.

May/June 2017

Russell Thurston: Small Town Stewardship in Brookneal

By Su Clauston-Wicker

Brookneal, Virginia, population 1115, may be the smallest incorporated town in Central Virginia, but that doesn't mean it's not progressive. Three major projects with a link to Hurt & Proffitt affirm that Brookneal is indeed thinking ahead, proactively planning to meet its citizens' needs. The most visible endeavor is Brookneal's streetscape improvement, bringing handicap accessible sidewalks, upgraded lighting fixtures, new signage, and attractive landscaping featuring roses and crape myrtle to three downtown blocks. H&P's Scott Beasley did the design work.

"When Patrick Henry built Red Hill Plantation here, he called this 'the garden spot of the world,'" says Town Manager Russell Thurston. "Having this beautiful greenery downtown adds to that feel."



The improvements create an inviting atmosphere for visitors who come to the Patrick Henry Memorial at Red Hill, the famous Brookneal Annual Striped Bass fishing tournament (April 29), or Brookneal's Day in Town Festival (May 6). Two other large projects are aimed at improving Brookneal's sewer and water service. Brian Cossman of H&P is finishing up a water quality preliminary engineering report that seeks to keep water from lingering too long in the town's small water system. Water age--the time from water treatment til it reaches customers' faucets--impacts its quality. H&P has analyzed Brookneal's system and made recommendations to keep water turning over rapidly enough that chemical interactions between the water and pipes are at minimum. H&P has also inspected Brookneal's wastewater system, noting potential blockages and aging pipes.

"This analysis will help us plan where to upgrade our infrastructure first," Thurston says. "Problems happen at the worst times, like Christmas Day, so we want to be proactive."

Thurston, who once worked as plant manager for a Fortune 500 company, lives near Brookneal on a 50-acre farm where he raises Christmas trees and pecans. He and his wife have a son and a daughter, both Liberty University graduates now living in Lynchburg.

"When I'm not working, one of my favorite things to do is looking in fields for Native American artifacts," Thurston says. "I've found hundreds, ranging from 600 to 6000 years old." Thurston has collected projectile points, pottery, a clay pipe, and other artifacts, displaying some in his town hall office. "It's an honor and a privilege to serve the citizens of Brookneal," he says. "H&P has always helped us serve, not only by doing a great job but assisting us with applying for and winning grants."

Andrew Fagan: H&P Transportation Engineer Traveler & Explorer

By Keli Ratcliffe



Andrew Fagan began working for an engineering firm, when he was 16 years old, but at that time he had no intention of becoming a Civil Engineer. In fact, when he joined Anderson & Associates, now Hurt & Proffitt, as an intern his junior year in high school, he had his heart set on becoming an architect.

He took four years of drafting in high school, and enjoyed creating house plans the most, so he thought Architecture would be the best fit. But during an art class in his first semester in the architecture program, he soon realized that the artistic side was not for him.

As an intern, he had racked up on civil-engineering experience. He spent years on the GIS team, digitizing county tax maps and referencing them to aerial imagery. Some of his GIS work can be seen on the Hurt & Proffitt GIS website www.webgis.net. Andrew also spent years surveying in the field and drafting survey plats. With this experience, it made perfect sense that he shift gears and switch his curriculum to Engineering at Virginia Western Community College, while continuing to work part time. He went on to receive his BS in Civil Engineering from Virginia Tech.



Since joining the firm full-time in 2009, he's worked on everything from surveying, to waterline inspection, to designing transportation projects. Now, as a project engineer on the transportation team, Andrew spends most of his time designing trails and railroad projects. He's an EIT, and plans on taking his PE exam in October. He loves collaborating with his team and with the H&P survey department, who he works closely with on a day-to-day basis.



Andrew definitely loves his job, but his true passion is traveling and exploring the outdoors.

He has discovered that he may not be artistic, but he definitely appreciates beauty. In fact, he seeks it out. He has traveled across continents and oceans to find it.

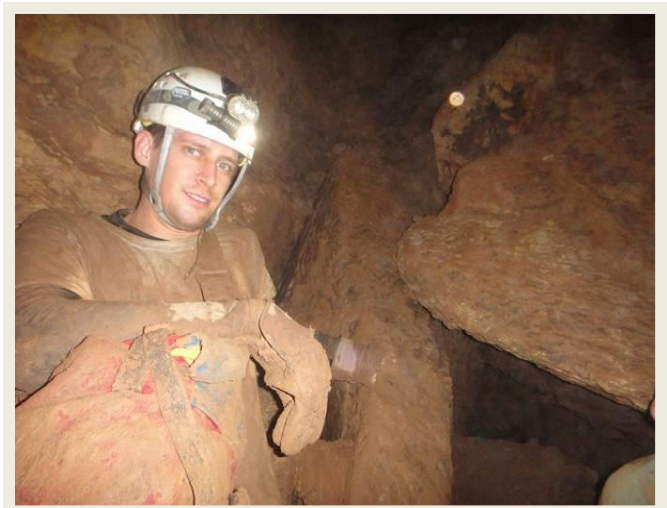
Recently, his adventures have taken him to Mexico, Germany, Austria, Iceland, and France. In Mexico Andrew drove with a small group of friends, 1900 miles from Blacksburg, VA to the mountains of San Luis Portusi, where he spent two weeks rappelling the

local pits. Golondrinas was the deepest, at 1200 feet, but his favorite was located 20 miles up a remote road from the city of Xilitla, a small farming village named La Trinidad, secluded high in the mountains. He spent the night there, and after eating his share of rice, black beans, avocados, and tortillas, hiked the two mile trek to Hoya De La Luz where he rappelled a gorgeous 600 foot pit.

He and his girlfriend, Marie, who is currently attending graduate school in France, explored Germany and Austria, circling Bavaria by train and by bus, and stopped for hiking in the Alps. He was very impressed by the passenger rail infrastructure there and the ease of getting around by train.

In Iceland he hiked the Fimmvörðuháls, a 16 mile excursion from Skógafoss to Thórsmörk. There, he backpacked over the lava flow and ash field of the 2010 eruption of Eyjafjallajökull. This adventure was one of the most beautiful he has experienced. The area boasts 23 waterfalls, and the terrain changes dramatically from lush greenery, to a “dead zone” created by the volcano eruption.

Andrew’s home is Blacksburg, Virginia, and he credits growing up in the New River Valley for his love of the outdoors. He spends weekends hiking sections of the Appalachian Trail from McAfee’s Knob to Mount Rogers. Along with being a hiker, he’s an avid caver and enjoys spending many hours underground. He will tell you that he definitely knows the New River Valley; even the holes in the ground. Andrew also enjoys gardening and riding his motorcycle.

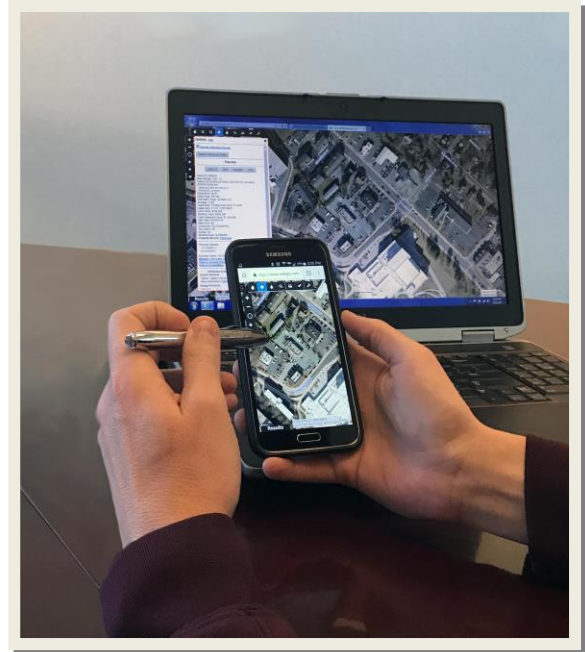


H&P Offers Geospatial Services and WebGIS

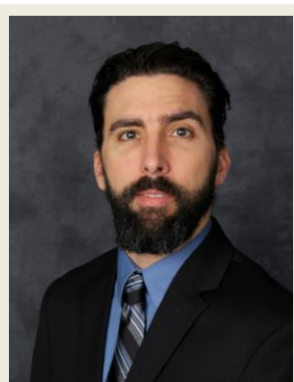
By Keli Ratcliffe

Geographic Information System (GIS) and Geospatial tools are critical in centralizing your data information and finding ways to make it work to your advantage. Whether that information derives from institutional knowledge, documents, digital maps, or even databases, having it available within a GIS allows the user to visualize the big picture of how this information is related to one another within their real world placement. A GIS eliminates lost information and streamlines communication which greatly improves efficient analysis and reporting.

The information collected and stored in your GIS has many uses. For example, use your hydrant locations and flow rates to indicate fire protection coverage, show static pressure readings from hydrology models and plan for future additions, pinpoint water leaks or storm water infiltration to help plan for system improvements, indicate flow capacity within the sewer network and determine how best to fix problems, implement work order tasks when a street has a pothole to fill or use several parameters to help you select sites to promote for potential businesses. The benefits go on and on.



Harness your GIS from the web. H&P's GIS team has been developing web-based GIS solutions for over 20 years. These websites can be used to locate, analyze, and exhibit information about any asset a locality wishes to display. Access to the information can be secure where login credentials are needed to view the website or totally open to the public. In the past, users were limited to only accessing the full power of GIS from a desktop computer. Well, those days are gone.



The fact that H&P's WebGIS is a powerful tool is undeniable. Our WebGIS websites boast a responsive design, ensuring that your data can be viewed most anywhere on any device. Another advantage of responsive design is that WebGIS can be used in the field more effectively for tasks such as utility management, location, identification, and even pipe isolation when applicable. Responsive design also opens the door for enhanced economic development, tourism, and wayfinding applications.

To fully appreciate WebGIS and its applications, you need to see it for yourself. Visit <http://www.webgis.net/WebGISClients.shtml> and click on one of our clients' sites. For more information about GIS, contact Bryan Powell, Director of GIS Services at bpowell@handp.com.

Virginia Tech Upper Quad Project Comes to Life

By Nicole Kmetz – Environmental Scientist
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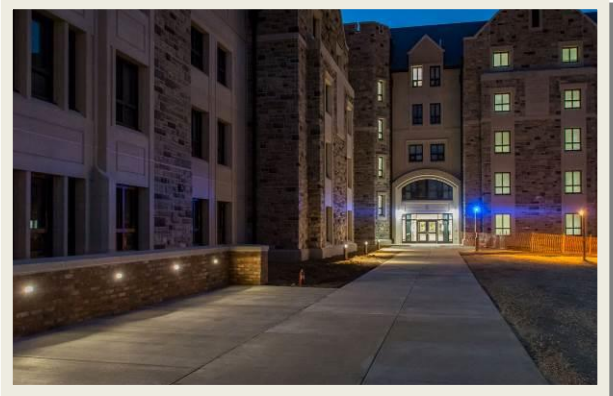
Hurt & Proffitt, formerly Anderson & Associates, began this project in 2013 with the demolition plans for the existing structures, Rasche Hall and Brodie Hall. Both buildings were originally constructed circa 1890's when Virginia Tech was known as Virginia Agricultural and Mechanical College. Because these were two of the oldest buildings on campus, special care was taken in preserving the history of the structures including the original names,

which honored a professor and the former first assistant commandant of the cadets. Floors in each of the new buildings will retain the name Rasche and Brodie so the history of those great Hokies will not be lost.

The next step was for Hurt & Proffitt to begin the site layout plan for the proposed construction. In order for our engineers to understand and design the site, the H&P Survey team completed extensive field work to document the topography and communicate this with the Land Development team. When considering how to arrange the new site layout, several criteria were considered including: maximizing usable space, utility line connections, sidewalk networks, access paths for emergency vehicles, parking, and minimizing environmental impacts. Other considerations were proximity to other important facilities including Lane Hall and the Moss Arts Center.

This was important both during the design and construction phases. Working hand in hand with Virginia Tech and Clark Nexsen (architect of record), Hurt & Proffitt produced a cutting edge design for the new residence halls. The design has been completed after extensive coordination with Virginia Tech and the design team. Construction of Pearson Hall, formerly Rasche Hall, was completed in 2015 and opened to the Corps of Cadets. Pearson Hall features updated living areas for students, conference rooms, laundry and kitchen facilities, and houses the famed Skipper cannon, well-known for its firing at football games.

The site design features state of the art elements including an underwater storm water detention system. The new structure replacing Brodie Hall is scheduled to be completed in 2017. The design team is excited see their work come to life and contribute to the Virginia Tech campus.



Upcoming Conferences

Be sure to come visit us at our booth!

We'll have door prizes, giveaways, and plenty of information to share.



May 10-12: Mid-Atlantic APWA

The Mid-Atlantic APWA Conference will be held in Fredericksburg this year May 10-12. Be sure to visit us at booth 118!

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