



LDDI What's Developing...

Land Development Design Initiative - www.lddi.cee.vt.edu - Blacksburg, VA
Phone: (540) 231-2474 - Fax: (540) 231-7532 - E-mail: lddi@vt.edu

January 2022

Volume 16, Issue 1

In this issue:

- Giving Day 2022 (p. 1)
- Recreational facilities come to D.C. and Davidson College (p. 2)
- Exciting new developments in Manassas City, VA and Sanford, NC (p. 3)
- An LDDI graduate reflects on the past, present, and future (p. 4)
- LDDI implements a new Industry Advisory Group (p. 4)

LDDI What's Developing...

is a publication of Virginia Tech's Land Development Design Initiative

Editors:

Kelly Shayne Young
ksyoung@vt.edu

Kevin Young
keyoung@vt.edu

VIRGINIA TECH

The Via Department of Civil and Environmental Engineering



New Year's greetings from LDDI and Virginia Tech! I hope this message finds you, your loved ones, and your organization enjoying a healthy and prosperous start to 2022. With each new year comes an opportunity for both individuals and organizations to reflect, renew, grow, and implement change. One change that I am excited to bring to your attention is the new name of this newsletter, "What's Developing..." This new name is one of the first outcomes from LDDI's recently established Brand Awareness Committee. Later in this newsletter, you can read about the exciting things happening with this and LDDI's three other standing committees, as well as how you can become involved.

The spring semester begins on Tuesday, January 18th, and will feature LDDI Assistant Coordinator Claire White and myself each teaching a section of LDDI's junior-level course. I'm also excited to announce that Claire will make her instructional debut in LDDI's hallmark course, Land Development Design. Please join me in wishing Claire the best of success as she comes "full circle" in this role following past involvement in the course as a student, graduate teaching assistant, and professional mentor. Rounding out the LDDI curriculum this spring, we look forward to Matt Stolte teaching LDDI's Municipal Engineering course for his third time.

While the lingering shadow of the pandemic may have precluded us from holding an in-person winter meeting, we optimistically look forward to a successful spring semester and hope to see many of you at various LDDI events over the coming months. On behalf of myself, Claire, and the LDDI Executive Board, Happy New Year and best wishes for 2022!

Kevin D. Young, PE, M. ASCE, VT LDDI Coordinator

Giving Day- February 23-24, 2022

Virginia Tech Giving Day is an annual event described as "a 24-hour celebration of the Hokie Spirit that provides an opportunity for students, alumni, employees, family, and friends to come together and show support for their favorite Virginia Tech organization." Last year, LDDI Special Events Committee Chair Caleb Hurst and LDDI Executive Board member Sue Wolford collaborated directly with the university's Advancement Division to assemble a group of 24 generous individuals whose pooled contributions allowed a \$250 match for the first 60 donations made to LDDI on Giving Day – regardless of the initial donation amount! When the dust settled on Giving Day 2021, LDDI received a total of 81 individual donations ranking **9th** among all organizations and departments in the entire College of Engineering!

Giving Day 2022 is right around the corner (February 23-24) and Caleb and Sue are once again busy putting together incentives to attract donations to LDDI on this important day of philanthropy. Over the coming weeks, please keep a lookout on email and on the LDDI LinkedIn group as we promote these incentives. 2021 set the Giving Day bar high for LDDI, and we hope that you will consider helping us match and exceed last year's success.



Dewberry Helps Bring New Football Stadium to Davidson College

Dewberry is working with Davidson College and Odell on the design of a new football stadium on campus. Dewberry is providing site/civil engineering, landscape architecture, surveying, and geotechnical services. The project, which includes up to a 6,000-seat stadium and three-story field house, is currently in schematic design with the goal of beginning construction in 2022.

The project will include a new building on the west side of the stadium to support football operations and game day needs, a new building on the east side of the stadium for restroom facilities, a stadium with on-grade stands on the east and west of the field, two large hardscape plazas on the west of the main building and east of the stadium for field hockey, and parking improvements to the existing gravel lot to the north of the site.



Construction will soon begin on Davidson College's new football stadium.

The proposed improvements will include extensions of underground utilities (water, sanitary sewer, electrical, telecommunications, and storm sewer). The project site will use stand-alone equipment for heating and cooling.

The proposed stadium turf will be synthetic and will incorporate storm water management within the field cross-section. All other storm water treatment will utilize capacity from the regional storm water management facility southeast of the soccer stadium.

christopher consultants Lends Expertise to Playground Development in D.C.

In partnership with local residents, a neighborhood recreational facility has been added to the Lamond Riggs neighborhood in Ward 4 of Northeast Washington, D.C. The Riggs-Lasalle Park Playground, led by Virginia Tech alumnus and landscape architect Colin McCann, transformed a muddy quarter-acre site into a state-of-the-art playground that has become a hub of interaction for neighborhood kids and their parents. Located just behind the LaSalle-Backus Recreation Center, the previously inaccessible green space is now providing the youth of the neighborhood a place to play and feel safe, in addition to providing many amenities for adults to enjoy.

Design of every phase was provided by christopher consultants' multidisciplinary team, including civil engineers, landscape architects, and surveyors. The construction was managed and executed by North Arrow Inc. for DC Department of Parks & Recreation.



A new state-of-the-art playground is now available to the children and families of Lamond Riggs neighborhood in Northeast Washington, D.C.

christopher consultants led public outreach sessions with the neighborhood's civic association and with the DC Department of Parks and Recreation to ensure that all residents had the opportunity to voice their needs and provide suggestions that led to the final design.

The much-needed playground included multiple play structures, swings, benches, LED pole lighting with integrated security cameras, permeable rubber surfacing, subsurface drainage, a fountain with a water bottle filler, and trees that will grow to provide plenty of shade in the years to come. The playground design and construction was fast-tracked by the city; taking just a year from project kickoff to final completion, the playground opened in June 2021. Although the formal ribbon-cutting had to be cancelled, McCann held his own informal ceremony. An enthusiastic group of young playground users gave an emphatic "YEAH!" when asked if they were happy with the finished product.

LDC Transforms Downtown City of Manassas Park, VA

Land Design Consultants, Inc. (LDC) is a mid-size land development engineering firm with nearly four decades of experience throughout the Washington, D.C. region.

LDC is proud to be part of a team that includes Norton Scott LLC, the City of Manassas Park, Gorove Slade, TNT Environmental, Inc., Balfour Beatty and Davis, Carter, Scott. The Village at Manassas Park is a joint venture with the City of Manassas Park and Norton Scott LLC through the Public-Private Education and Facilities and Infrastructure Act (PPEA). This PPEA will deliver a world class city hall and library, public plaza, splash park, hundreds of residential units, a public, structured parking garage to support the existing Virginia Railway Express station, and other mixed uses which may include retail, office, and a cinema.

This effort reimagines a new downtown for the City and seeks to convert it into a lively, pedestrian oriented, mixed-use development anchored by the public plaza which will allow food trucks, outdoor movies, outdoor seating, and other activities for gathering as a community. The Village will allow for multi-modal opportunities with improved travel choices, connectivity, public spaces, and a rich mixture of uses which seek to achieve a unique sense of place.

LDC provided all land use planning, landscape architecture, land development engineering, and construction stakeout for this venture.



The Village at Manassas Park will provide community residents and visitors a unique public space.

WithersRavenel Brings New Manufacturing Plant to Sanford, NC

WithersRavenel served as the primary engineering consultant for Project Forge, which led to Bharat Forge America, Inc. agreeing to build an automobile component manufacturing plant in Sanford, NC. The company will invest more than \$127 million and create more than 300 jobs, with further investment and job growth planned with future site development.

WithersRavenel led project due diligence during the initial site selection. In two weeks, the project team assembled a boundary survey, geotechnical investigations, wetland delineation, and a Phase 1 ESA for the 98-acre property. WithersRavenel collaborated with local governments and the Kalyani Group to create development and permitting strategies for a demanding project schedule. Subsequently, WithersRavenel provided additional surveys and grading and erosion control plans, in addition to funding application/administration assistance. The team then partnered with Sanford Contractors on a design-build contract to provide the site building pad, entry roadway, and utility connections on behalf of the City of Sanford.

WithersRavenel's services included project management, due diligence, civil engineering, surveying, site design, environmental, permitting and funding administrative services for the project. Additionally, WithersRavenel was recently honored with a North Carolina American Council of Engineering Companies (ACEC) Engineering Excellence Award for its achievements on the project.



Bharat Forge's new plant will create hundreds of jobs in Lee County, NC.

Thank you to our corporate sponsors and municipal members!

DYMOND

Advanced Drainage Systems ~ Bohler ~ Bowman ~ Concrete Pipe and Precast, LLC ~ Edens Land ~ Pennoni Associates, Inc.

PLATINUM

ATCS, P.L.C. ~ christopher consultants, ltd. ~ Charles P. Johnson & Associates ~ Dewberry ~ Draper Aden Associates ~ Gordon ~ J2 Engineers, Inc. ~ Kimley-Horn and Associates, Inc. ~ Koontz, Bryant, Johnson and Williams ~ Land Design Consultants ~ McAdams ~ Timmons Group ~ Tri-Tek Engineering ~ VHB ~ WithersRavenel

GOLD

AES Consulting Engineers ~ Balzer & Associates ~ Cowen Design Group LLC ~ Delta Airport Consultants ~ Gay and Neel, Inc. ~ Hurt & Proffitt ~ Institute for Sustainable Infrastructure ~ Lumsden Associates, P.C. ~ Rodgers Consulting ~ Van Metre Homes ~ Youngblood, Tyler & Associates, P.C.

SILVER

Burns & McDonnell ~ Colman Engineering, PLC ~ Eden & Associates, PC ~ Mattern & Craig ~ Ramey Kemp & Associates ~ Virginia Waters and Wetlands ~ Wetland Studies

MUNICIPAL

Fairfax County



VIRGINIA TECH.

LDDI What's Developing... January 2022

**Graduates in the Industry: Lanna Clement
ATCS Project Manager**

Lanna Clement completed her academic career in 2014, earning a B.S. in civil engineering from Virginia Tech. Lanna began her professional career at Bohler immediately following graduation and transitioned to a position at ATCS five years later. She currently serves as Project Manager in ATCS's Largo, MD office.

While a student, Clement took advantage of such LDDI courses as Intro to Land Development, Sustainable Land Development, and Land Development Design. "Sustainable Land Development taught



"The LDDI program offers its students access to industry professionals they otherwise might not meet" - Lanna Clement, ATCS Project Manager

me about best management practices (BMPs) and how they can be used to mimic pre-development site conditions," recalls Lanna. "Land Development Design was wonderful for teaching me the entire site design process from concept layout to a full detailed design. The coordination with practicing land development professionals on real-world projects provides exceptional value that is unique to Virginia Tech."

Lanna delights in sharing the knowledge she's gained over the past 7+ years while mentoring junior engineers. "Watching

engineers grow, learn, and mature has been very rewarding," explains Clement. "I have been able to work directly with one engineer since May 2020. This young engineer has learned pipe computations, stormwater management calculations, and fine grading, and she will soon complete a full site design on her own (with supervision). I really enjoy seeing females enter this field and championing their careers!"

While she misses the campus food, Hokie football games, and having all of her friends in one place, Lanna relishes the life/work balance she's found in Maryland. She loves watching her 20-month-old son grow up, and this April, she will watch him officially become a big brother!

New Committees Get to Work

In Spring 2021, LDDI adopted a new organizational model that included the creation of an Industry Advisory Group comprised of four standing committees: Brand Awareness, Membership, Practitioner/ Technical & Research, and Special Events. The new model also established a Young Members Group to provide a path for LDDI graduates to become involved during the early stages of their careers. Surveys were conducted among the LDDI membership to initially populate the new committees, and upon doing so each committee was tasked with identifying a Chair. Each committee also appointed a Vice Chair selected from the Young Members Group. With leadership structure in place, the committees then began the tasks of writing their charters and identifying immediate action items. The table below summarizes the items on which each committee is currently working.

Brand Awareness Co-chairs: Brett Buckland, Rob Reddick	Membership Chair: Josh MacDonald	PTR Co-chairs: Cody Mudd, Brian Utterback	Special Events Chair: Caleb Hurst
<ul style="list-style-type: none"> Reviewing/updating program name and logo Reviewing/updating LDDI website 	<ul style="list-style-type: none"> Planning 2022 General Meetings Preparing for annual sponsorship drive 	<ul style="list-style-type: none"> Reviewing CEE elective courses complementary to the LDDI curriculum Conducting practitioner involvement survey 	<ul style="list-style-type: none"> Promoting 2022 Giving Day Planning practitioner recognition and appreciation events

If you are not already a member of one of the new LDDI committees and wish to become one, please contact Kevin or Claire indicating your preference and they will connect you with that committee's Chair.