



Hammers At The Ready – Habitat House Build 2018!

Habitat for Humanity is propelled by a vision of a world where everyone has a decent place to live. For four years now, Duncan-Parnell has been proud to partner with Habitat for Humanity and help build new homes for deserving families in the communities we serve. In 2018, we are humbled once again to be building a home through this partnership for Merissa and her children in Charlotte, NC.

Originally from New York, Merissa has called Charlotte her home for over 20 years now. She's got her hands full with four sons, who are all 4 years or younger. Merissa works in customer service for a local medical company and she first learned about Habitat for Humanity through a work friend who just recently moved into her own home. Merissa loves to take pictures and has documented most of the process so far. She says she drives by her lot at least 3 times a week just to check on things and see what progress has been made. She is very excited to move into her home so that her boys and the family dog will have space to run around in.

"Home ownership is the best way to break the cycle of generational poverty. Habitat for Humanity enables home-ownership for deserving folks that are determined to improve their family's future", expressed Mark Duncan, President of Duncan-Parnell. "By supporting Habitat, we are giving back to the communities that have been so good to us. I am grateful to be able to share the success that Duncan-Parnell has experienced over the years in a tangible way that makes a lasting, positive impact on our community."

Each year many of our employees and their families volunteer their time for this rewarding endeavor and we look

forward to doing the same again this Spring to build a home in Charlotte. Construction is set to kick-off Friday, February 23rd and usually lasts 8-10 weeks.

If you are interested in getting involved and helping as well, please email us at contactus@duncan-parnell.com



Do More With Less – Efficiency & Technology All-In-One

Trimble SX10 – Combines surveying, imaging and high speed 3D scanning in one revolutionary solution. The SX10 is impossibly precise, endlessly versatile and in a class all its own. In one word... **revolutionary**. The SX10 will change the way you work.

Capabilities:

- Incorporation of 3D scanning technology into familiar surveying field and office workflows.
- Full integration with Trimble Access, Trimble Business Center and Trimble RealWorks.
- Utilizes Trimble Lightning scanning technology to scan up to 26,600 points/second, captures a full dome in as little as 12 minutes
- Collect high density point clouds and high resolution imagery quickly and easily.

Applications: One Investment – Many Opportunities

- Topographic/General Survey
- Roadway & Corridor Surveys
- Volumetric Surveys
- Infrastructure As-Builts
- Utility Design Surveys
- Power Line Inspections
- Forensic Surveys
- Mine/Quarry Surveys
- Tank Calibration & Inspection
- Dimensional Control



More information available at: bit.ly/2zMINVg

Project: Saving Slave Houses

Jobie Hill, AIA, LEED AP, NCARB
Historic Preservation Architect & Project Founder



Jobie Hill is the founder of the Slave House Database, a central repository of information pertinent to all the known slave houses in the United States. She created the framework for the database in 2012 while working as an architect for the Historic American Buildings Survey (HABS), part of the Heritage

Documentation Programs division of the National Park Service. HABS has completed surveys of slave houses at approximately 485 sites in 26 states. Her goal is to survey all of the HABS-documented slave houses in the U.S. – no small task!

Since 2014 when Jobie first approached us, Duncan-Parnell (DP) has supported her project by providing a donation of Trimble TerraSync & Pathfinder Office software and technical support. She has also been using a Trimble GeoExplorer donated by a third party. Having the proper equipment is crucial to the success of the project, allowing Jobie to survey a building quickly and efficiently, completing multiple surveys in one day. It also ensures that the information collected meets the standards of other historical organizations.

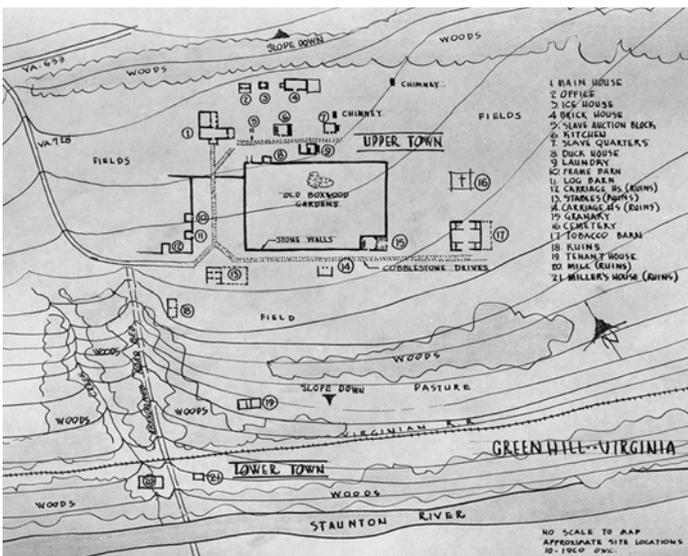
DP recently spent a day with Jobie on-site at the Green Hill Plantation in Campbell County, VA. Also on location was a team of preservationists, scanning technicians from Trimble, and C-Span network television. Green Hill Plantation was established in the 1797. The original owner was very active in the slave trade, making the site



rich in history and material culture. Today there are about twenty remaining structures on the plantation, spread out over 198 acres. The team had their work cut out for them – scanning the entire site in just 2.5 days. While Jobie documented the site with photographs, GPS and a digital survey form, the Trimble team scanned, surveyed and mapped the plantation in its entirety – buildings and landscape – using a Trimble TX8 Laser Scanner and a Trimble R10 GNSS System. They were able to capture multiple images and create a dimensional point cloud. The final product for Jobie was a 3D model of the plantation which can be used in a variety of ways: 360° views of the plantation (interiors & exteriors); measured drawings of the buildings, floor plans, elevations, virtual reality applications, even 3D printing of the buildings – a vast improvement over the traditional 2D images.

As the surveying season came to a close, Jobie was wrapping up her endeavors in the mid-Atlantic area and looking to other regions of the U.S. to continue her work. When she has reached her goal, the database will be an invaluable archive, safeguarding these pieces of American history long after the dwellings themselves are gone.

A 50-minute C-Span presentation on the documentation of Green Hill can be viewed at: bit.ly/GHP-Survey



* Certain products not available in all locations due to manufacturer's restrictions.

News & Updates

NEW value-added features for Trimble Protected Plus plans for Trimble Access. Trimble Access can now be transferred from one device to another as long as the warranty is current. For example, Access on an existing TSC3 or Tablet can now be transferred to a Trimble T10, Yuma 2, or a 3rd party Windows 10 device. Beginning in January, there are a few changes in the way software and hardware maintenance warranties will be handled: bit.ly/2Claked

Trimble recently released a new version of GNSS Firmware. Our support and service staff have run it through their tests, and they've given the all clear to install. You need to have a warranty expiration date of June 2017 or later. For a list of receivers that are supported with the new release and installation instructions: bit.ly/2BpBzX4

Trimble VRS Now™ Service in Georgia offers instant access to real-time, centimeter-level RTK corrections with no base station setup or maintenance. Start working immediately and experience the outstanding service available and stability via Trimble's state-of-the-art network infrastructure, providing customers with reliable centimeter-level accuracy. Learn more at: bit.ly/VRSnow

Trimble Business Center (TBC) v4.00 introduced a new static GNSS Baseline Processing Engine that improves accuracy and results in more fixed solutions for all baseline lengths. It also supports three frequency post-processing, mixed-signal post-processing, and all IGS precise product corrections needed for ITRF support. bit.ly/2EtA78R

Penmap for Android 10.7.1 is now available for download from the Google Play Store. New features include: US survey feet & international feet support when importing .csv, .shp, .dwg & .dxf source data files or exporting .cvs or .shp files. Google Play Store Download link: bit.ly/2rE5XtL / Webpage link: bit.ly/2BtMfk3

TBC: Working With Point Clouds. A new bulletin explains the difference between working with point clouds in TBC and Trimble RealWorks® software, and how to work with point cloud data from multiple sources like terrestrial and aerial hardware in TBC: bit.ly/2EAZ01u

Our eStore has grown! Take a look at our new Clearance Page, now including wide format printers, wide format parts & supplies, and geospatial items: bit.ly/2G7DdM1

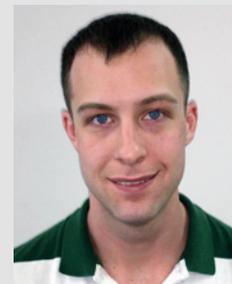
Tech Tip: Calculating Digital Terrain Model (DTM) Volumes In Survey Pro V6.2

The Calc DTM Volumes screen allows you to calculate the volume of a DTM surface relative to a datum elevation or another surface.

Surface. Choose the surface you wish to calculate the volume for. Click the power button to the right of the surface list to access more DTM functions:

- **Preview DTM.** Shows a horizontal map of the DTM overlaid on the map of your job points.
- **Manage DTM.** Opens up the Manage DTM screen.
- **Compare to Datum:** Choose this option if you want to calculate the volume between the surface and a single elevation. The volume will be calculated between the surface and the elevation you specify.
- **Datum.** Select the elevation datum for volume calculation.
- **Compare to DTM.** Choose this option if you wish to calculate the volume between two surfaces. The volume will be calculated between the two surfaces where they overlap.
- **Surface.** Choose the other surface for volume calculation.

Note: The volume calculated for the surface may be positive, negative, or even 0. In the results, Survey Pro will display the total volume along with the calculated fill and cut volume. The total volume will be the fill volume minus the cut volume.



Meet A New Member Of Our Team

Help us welcome Ben Richardson as our newest Geospatial Office Technician. After serving in the U.S. Marine Corps as a heavy machine gunner on two combat deployments for a Combined Anti-Armor Team, Ben earned a Bachelor's degree in Electronics Engineering and Technology from ECPI University. In his new role, Ben will be providing software and firmware assistance. Ben can be reached at **919-460-8886**, or ben.richardson@duncan-parnell.com

WaveLengths

GPS, Surveying & Mapping News

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YOUR TRIMBLE SURVEY & MAPPING CONNECTION
IN THE CAROLINAS, GA, VA, WV, MD, DE, DC & TN*

NEW! Trimble T10 Tablet

Fast computing and a large screen for the field, the T10 supports demanding desktop applications to provide a single-device solution for efficient data processing on the job. Designed to work all day even in difficult conditions, the T10 enables survey and GIS professionals to efficiently and reliably collect and process data for analysis and visualization on a significantly larger display, using the latest Windows® 10 platform.

Key Features:

- Fast and powerful processing to support demanding field applications and create high-quality deliverables even when outside of the office.
- Enhanced interaction with detailed map and imagery through a large 10.1", high resolution display.
- Full Windows desktop apps brings office to the field.
- Rugged form factor and long battery life for all day operation even in tough environments.
- Latest Windows Desktop Operating System.
- All Day Field Operation – IP65-rated with military ruggedness certification and hot-swappable battery.

Learn more: bit.ly/2DDmbsG



Shown with optional
detachable keyboard