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Curriculum for Advanced RTK

- I. Day One (Morning)
 - A. Introduction and Needs analysis
 - B. Class Overview
 - C. Trimble Business Center & Calibrations
 1. Create Job Templates
 2. Discuss Calibrations
 - a. View Calibration Power point
 - b. 1 point versus multiple points
 - c. Error analysis
 - d. Troubleshooting Calibration Problems
 - e. Using the HERE key and its ramifications
 - f. Nullifying Calibrations
 - g. Transferring Calibrations to DC.
 3. Upload Geoid 03 model to data collector
 - D. Survey Style Discussion
 1. Discuss the RTK survey style
 - a. Review settings for the RTK survey style
 2. Discuss the RTK & infill survey style
 - E. Field Exercise overview
 1. Discuss RTK & infill Field procedures
 - a. Discuss basic job parameters
 - b. Go over steps and what will be accomplished in the field
 - c. Preparation & how to back calculate "Here Key"
 - d. Upload job coordinates to data collector
- II. Day One (Afternoon)
 - A. Answer questions from Morning session
 - B. Field Exercise
 1. Base station setup w/ RTK & infill in mind
 - a. Discuss environmental concerns
 - b. Discuss base point ramifications
 - c. Discuss data logging procedure
 - d. Discuss radio concerns

- e. Start base receiver
 - 2. Perform calibration
 - a. Discuss parameters for calibration points
 - b. Discuss importance of known point initializations
 - 3. Measure additional calibration points
 - 4. Go into infill mode
 - a. Collect topo pts. and continuous topo pts.
- C. Back in office/ download data
 - 1. Discuss the work that was done and the reports that can be generated.
 - 2. Process the unprocessed baselines
 - 3. Save the .dat file for "Here Key" corrections
 - 4. Create Calibrated Site
 - a. Go back and forth between coordinate systems
 - 5. Answer any questions

III. Day two (Morning)

- A. Recap what happened the day before, answer any questions
- B. Create and upload a Feature code library
- C. Create and upload a Road and DTM
 - 1. Discuss how Road creation can help
 - 2. Discuss how DTM's can help in Road creation
 - 3. Volume Calc's in DTMLink
 - 4. Create all four components of the Road
 - 5. Upload the Road to the data collector
- D. Explain the Quick Plan software
 - 1. Download an ephemeris
 - 2. Look at the graphs and plan day accordingly
- E. Download CORS data/OPUS
 - 1. Discuss how and what to watch out for on CORS data or
 - 2. Get Coordinate Seed from OPUS
- F. Process .dat file (from previous day)
 - 1. Discuss how to determine quality
 - 2. Discuss how to fix the "Here Key" position
- G. Prepare for the field
 - 1. Upload Feature Code Library and true base point

IV. Day two (Afternoon)

- A. Perform data collection (possible feature code library)
- B. Stake out road that was created
- C. Connect to a total station and use it to collect data (if possible)
- D. Back in the office
 - 1. Download data
 - 2. Perform linework
 - 3. Generate reports (cut sheet report)
- E. Go over "In office" calibrations

- F. Go over upgrading equipment and FW/SW agreements
- G. Question & Answer session