

Survey Report

35832

KYSW Flourspar - MOD

GPS Field Collection

Mode: RTK

Corrections Source: Kentucky CORS (KYCORS) RTN via VRS network

Occupation Method: Each location recorded consisted of a minimum of two occupations, with a minimum of 3 minutes (180 epochs) per occupation, then a second occupation for at least 3 minutes (180 epochs). If the difference between the two occupations exceeded 0.01 feet horizontal or vertical, a third occupation was performed for a minimum of 3 minutes (180 epochs).

Initialization (FIX) was broken and re-initialized between all occupations. The same point ID was used for all occupations at each location.

No static observations were necessary.

Equipment:

GPS Receiver: Trimble R10

Data Collector: Trimble TSC3

Field Software: Trimble Access

Office Software: Trimble Business Center

Conventional Field Collection

Occupation Method: Two temporary points were established according the GPS Field Collection Occupation Method. A robotic total station was used to occupy one of these temporary points, while back sighting the other. A single angle observation was then taken to record the target location.

Equipment:

Total Station: Trimble S8

Prism: Trimble MT1000

Data Collector: Trimble TSC3

Field Software: Trimble Access

Office Software: Trimble Business Center

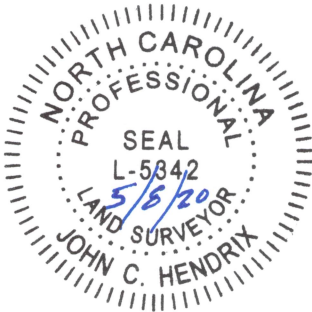
Processing Method

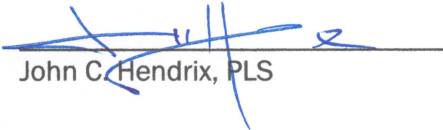
Field data (Trimble Access .job files) was imported into Trimble Business Center (TBC). TBC settings were configured to flag any point with accuracies greater than 2cm (0.0656 ft) @ 95% confidence.

Because all occupations on common locations were recorded using the same point ID, TBC automatically derived an averaged point location for each location. Vectors exceeding the

accuracies of 2cm (0.0656 ft) @ 95% confidence were then analyzed to determine their effect on the derived point's accuracy, and whether those vectors would remain enabled as part of the derived point's solution. Individual vectors that possessed a residual being out of tolerance of the mean vector for its location were also disabled.

I, John C. Hendrix, PLS# 5342 do certify that the dataset described above, being surveyed on March 5, 2020, was completed utilizing the above mentioned methods and does meet or exceed the accuracies stated.




John C. Hendrix, PLS