



United States Department of the Interior

National Geospatial Technical Operations Center

U.S. Geological Survey
1400 Independence Road
Rolla, MO 65401

U.S. Geological Survey
Box 25046 MS 510
Denver, Colorado 80225

AMENDMENT #2 TO JOINT FUNDING AGREEMENT 16H5IL001

April 26, 2017

Richard Knodel
18 North County Street
Waukegan, IL 60085

Mr. Knodel,

This letter is to modify the Joint Funding Agreement (JFA) #16H51L001 dated March 9, 2016 and modified April 18, 2017, between Lake County, Illinois and the U.S. Geological Survey for Lidar activities and products.

The purpose of this amendment is to add \$27,896.89 in funding to purchase some of the additional project deliverables listed on pages 4 and 5 in the statement of work of the original agreement (see attached). Specifically,

- Additional Lidar classification- Buildings and vegetation (high, med, low), classifications will be derived from a macro that developed for this area and the output results will be fully automated. There will be omission/commission errors in the classification, meaning there will be buildings that may be classified as veg or noise as well as the potential for non-building structures to be classified as building.
- Additional Hydro Breaklines- All ponds greater than or equal to 100sqft and perennial (including single line streams with water present) will be collected. Single line drains will adhere to standards typical of area rivers, such as monotonicity and horizontal placement.
- Contours- One foot contours will be derived through an automated process. Topology checks for dangles not along edges will be validated and fixed. All other errors such as self-intersects and overlaps will not be checked or fixed.

Accordingly, section 2 of the original agreement is hereby modified to read as follows:

2 (b). ~~\$ 158,136.89~~ by the party of the second part during the period date of last signature to January 30, 2019.

This amendment does not affect any of the other terms of the agreement.

Please have the approving official sign this amendment and return a fully executed copy to the following address:

Walter Kloth
USGS, National Geospatial Technical Operations Center (NGTOC)
P.O. Box 25046, MS 510
Denver, CO 80225-0046
Phone: 303-202-4334

It would also be acceptable if you should choose to return a PDF of the fully executed amendment to the following E-Mail address: wkloth@usgs.gov.

If you have questions or need additional information, please contact Leslie Burns as shown above. Thank you for your participation in this cooperative effort.

U.S. GEOLOGICAL SURVEY,
NATIONAL GEOSPATIAL TECHNICAL
OPERATIONS CENTER (NGTOC)

LAKE COUNTY, ILLINOIS

(Signature)

Kari J. Craun
Director, NGTOC

Date_____

(Signature)

Aaron Lawlor
Lake County Board Chairman

Date_____