## **Phase I Remaining Effort - Orthos**

Steps	Status	Expected Completion
Raw image color adjustment and sharpening	Task is underway. Some additional adjustments will come in the rectification QC/edit phase.	12/23/16 (Partially complete)
Image Rectification	Completed.	1/2/17 (Completed)
Rectification QC	Completely identifying all motion blur and the offending frames that need to be removed from the mosaicking process. Approximately 9% of the reviewed 59% of total frames reviewed have some motion (as of 1/9/17)	01/11/17 (In Progress, 59% complete)
Mosaic Tiles	Rectifications to be mosaicked after removal of blurred imagery.  Tiles will be color balanced and seamlines created during this phase.	01/18/17 (Projected to potentially slip a day)
Tile QC, Edit and Re-Delivery	100% Visual Inspection of mosaicked imagery to locate and correct any processing anomalies and any other errors created in previous steps.	02/06/17 (On target)

#### Notes:

- Feedback from KGIS: Final ortho color/tone considered 'very green' (12/22)
- Planning to send color adjustment sample for approval (Around 1/18)



# Phase II Remaining Effort - Hydrology

Steps	Status	Expected Completion
QC / Fix Calls from KGIS	<ul> <li>Performing full QC of Blocks 1-4 hydrology, incorporating all KGIS edit calls into our review/correction process. Mostly migrating small single line drains to double line streams.</li> <li>Not performing horizontal placement based on imagery where it conflicts with LiDAR terrain. Will visit/annotate why QC calls were not fixed.</li> </ul>	01/20/17 (In Progress, Date moved to right upon receipt of Blocks 3-4 calls on 1/9/17)
3D Conflation of all Active Hydro Features	<ul> <li>Conflating features that flow Downhill, and that are flat</li> <li>All conflation is done by selection due to "retired" and Historical features not needing to be conflated</li> <li>Conflation of "other breaklines" dams and retaining walls</li> </ul>	02/03/17  (A lot of unknowns due to # of features compared to other county / USGS efforts)
Check Monotonicity and Vertical Variance	<ul> <li>Check every "active" piece of hydro for correct downhill and mono</li> <li>Compare every piece of hydro to the surrounding ground elevation and derive a "Delta Z" value that shows us how far above/below the breakline is located</li> <li>Fix any issues that may arise</li> </ul>	<mark>02/10/17</mark> (Approx. 1 week)
Build Contour Terrain	The terrain surface used to create contours has 4 foot buffer around all single line drains and 2 foot buffer around all double hydro features     Build final contour terrain	02/13/17 (Approx. 1 week)
Contour Generation and QC	<ul> <li>Test block of contours gave us an overall idea of about <u>42</u> hours just to process out the contours</li> <li>Will have to run out at 2 foot contours and then generate separate feature classes through selection to also deliver 10ft, 20ft, 50ft, and 100ft</li> <li>Generalize contours (less vertices)</li> <li>Clip Building contours and attribute</li> <li>Generate depression contours</li> <li>Flip geometry of depression contours</li> <li>Attribute all contours for (index intermediate, obscured, structural, etc.)</li> <li>Load contours into final GDB</li> <li>Final topology errors and corrections</li> <li>Spot Elevation placement and re-conflation from contour surface</li> </ul>	03/20/17 (Approx. 4-5 weeks)



# Phase II Remaining Effort – LiDAR & DEMS

Steps	Status	Expected Completion
Classify Buildings (LAS 1.2 & 1.4)	Complete	N/A
Classify Hydro (LAS 1.2 & 1.4)	<ul> <li>Using Final QC Ortho, classify all Class 2 (Ground) points to Class 9 (Hydro) within the double line drains</li> <li>Buffer breaklines and Classify all Ignored Ground</li> <li>Run Statistics in LP360 to identify any systematic issues that occurred during classification</li> <li>Perform visual QC in Global Mapper</li> </ul>	02/17/17 (Approx. 2.5 weeks after hydrolines are horizontally complete)
Develop Hydro- Flattened DEMs	- Run out DEMs to tile index - Perform visual QC in Global Mapper	03/10/17



# Phase II Remaining Effort - Plan & Breaklines

Steps	Status	Expected Completion
Planimetric Pre-QC	Identify the updates that need to be made for existing planimetrics. Will run in parallel with the planimetric updates.	02/24/17
Planimetric Updates of Existing Knox County Data	Correct the polygon/polyline features in accordance with the KGIS data dictionary.	03/03/17
Validate/Complete attribution of Knox County Data	Merge all production blocks back into a seamless database, run topology and make any tie corrections to create a single, seamless database.	03/17/17
Final QC of Knox County Data	Perform a final Qualitative review of the planimetric data prior to final delivery.	03/31/17
Planimetric Extraction of KUB Extension Area	New planimetric feature extraction of polygon and polyline features in accordance with the KGIS data dictionary. This process will run in parallel to the Knox County updates once a significant portion of the tie area along the boundary has been completed.	04/28/17
Validate and complete attribution of KUB Extension Area	Includes both lines and polygons	05/05/17
Merge / Tie of KUB Extension Area with previously delivered Knox County Data	Merge all production blocks back into a seamless database, run topology and make any tie corrections to create a single, seamless database.	05/12/17
Final QC of Geodatabase	Perform a final Qualitative review of the planimetric data prior to final delivery.	05/19/17

### Notes:

- Expected to deliver proof-of-performance data with final Hydro (1/13)
- Focusing on not over-collecting/zooming in to match spec (1:1200)

