



17 April, 2009

State of Idaho Technical Working Group

RE: Follow-up on additional data options for 2009 Idaho NAIP

Introduction

First of all, I would like to thank the ID TWG for allowing us to participate in the telecon on 15 April. This was very informative for us – and hopefully the same for the members of the Working Group.

This memorandum notes important information gleaned from the meeting and includes the action items involving Surdex. If I missed something, please let me know so that I can address it.

Seamless Mosaic in State of Idaho Transverse Mercator

There seems to be interest by a number of parties in a statewide seamless mosaic, possibly projected to the Idaho State Transverse Mercator (ID TM) projection. I would like to clarify a few points on this:

1. Since this can be delivered prior to the receipt of the DOQQs from the USDA, please note that any corrections arising during detailed inspection later by the government would be updated by Surdex in the seamless mosaic. As stated in the previous memorandum, our NAIP production process uses the seamless mosaic as the basis for extracting DOQQs. Likewise, any corrections are first applied to the seamless mosaic before DOQQs are re-extracted and provided to the government. Our past history indicates that the corrections amount to a “handful” of DOQQs in each state – ranging from zero to perhaps a couple of dozen.
2. Depending on any options elected by the State concerning the seamless mosaic, we would anticipate delivery in the November-January timeframe.
3. Note that the State can dictate a tiling scheme that is amenable for the seamless mosaic in ID TM. We currently default to 8Kx8K pixels (~256MB per tile), but can provide a smaller or larger size if desired. Recall that our software is very versatile and can create virtually any time of tiling scheme – such as PLSS sections and townships.

Our understanding of the ID TM is as follows. Please let me know if this information is incorrect – gleaned from the ESRI “.prj” file on record for the State.

1. NAD83 datum.
2. Linear units in meters.
3. False easting of 2,500,000, false northing of 1,200,000.
4. Central meridian at 144° west longitude.
5. Latitude origin at 42° north.
6. Scale factor of 0.9996.

Within the next 2 weeks, Surdex will produce a price estimate for the seamless coverage, including options that the State may be interested in.

Higher Resolution Add-Ons

Some interest was expressed in higher resolution add-ons. As I stated in the telecon, please be advised that this would entail additional contractual arrangements. The USDA will not allow this to be run



through the NAIP contract. If there is interest in this by collective or individual groups, please contact me or Mike McGuire of Ascent GIS and we can provide guidance and/or estimates.

2' Resolution

I agreed during the telecon to have our flight planners create a shape file showing the areas in ID that will be acquired at resolutions of 2' or better – which will be principally in the northern 2/3rd of the state. Surdex's internal NAIP kick-off meeting was this morning and detailed flight parameters were settled upon to allow mission planning to proceed. I should be able to provide this shape file within the next week.

Should the resulting coverage from this be amenable to partners in the State, we will generate a cost estimate to produce 2' digital orthophotos for review by the State.

Stereoscopic Imagery

Some interest was expressed in stereoscopic imagery. Since we are flying a frame digital camera (the DMC), this would entail us simply delivering the raw imagery and the aerotriangulation results. This was done for the Washington DNR in 2007 and they used their SocetSet software to display and measure from this imagery.

In the coming weeks, I will better define this option and provide a price estimate.

Closing

Feel free to contact me or Mike McGuire of Ascent GIS at any time.

Craig W. Molander

A handwritten signature in blue ink that reads "Craig W. Molander".

Senior Vice President, Business Development

Telephone: 636-368-4420
Cell: 314-614-0200
E-mail: CraigM@Surdex.com
Facsimile: 636-537-9638

Surdex Corporation
520 Spirit of St. Louis Blvd.
Chesterfield, MO 63005