- 4. Upon completion of the DTM compilation for each stereo model, all compiled data will be reviewed by the technician that collected the data. Contours will be generated to check for high and low "spikes", and any other data abnormalities.
- 5. Upon completing the self-check and making any necessary edits, the Photogrammetry technician will notify a senior level technician or shift-supervisor that they have completed the stereo model, and that they require a quality review of the data contained within that stereo model.
- 6. The senior-level technician or shift supervisor will review and check the DTM in the stereo model following the criteria listed in #2 above. Any errors detected by the senior technician or shift-supervisor are to be noted to the technician collecting the data so that the technician may make any necessary revisions. These revisions will be reviewed by the senior technician or shift-supervisor before final sign-off on the stereo model. The date of the final sign-off will be indicated adjacent to the senior technician or shift-supervisor's endorsement.
- The approved, final review must be signed-off and dated by the senior technician or shift supervisor performing the final review before the Photogrammetry technician proceeds to the next stereo model. Steps 2 – 7 must be repeated for each stereo model within the project.
- 8. After the DTM for the entire project has been compiled, edited, and checked as outlined above, the individual stereo model files will be merged (if necessary), and the entire DTM file will be reviewed one final time for completeness and correctness by the shift supervisor. Contours will be generated for the entire file to check for "spikes", data compatibility problems, and other data abnormalities. If any errors or omissions are detected, the shift supervisor may at his/her discretion, correct the file(s) themselves or return the file(s) to the Photogrammetry technician for correction.
- 9. The shift supervisor will notify the respective survey coordinator/survey technician/design technician by email or paper mail, when the DTM file has been quality checked and approved. The shift supervisor will move the file to the appropriate location on the VDOT Survey server, and maintain hardcopy records in the paper file of all correspondence relating to the file and the project.

## **Orthophoto Generation**

The following steps are to be used for quality assurance of the orthophoto process.

- 1. The digital terrain model (DTM) file will be assumed to be correct as verified by the quality control procedures used in the respective Photogrammetry unit. Scanned images and aerotriangulation adjustments will be assumed to be quality-checked by the respective Photogrammetry unit, and ready for use in the orthophoto process.
- 2. Individual orthophoto images created from ortho-resampling process will be visually inspected using image display software. Images of poor quality will be ortho-resampled again.
- 3. Ortho-rectified images will be checked for proper geo-referencing and geometric quality, and any abnormalities to the ortho images. A problem with any of these indicates problems with scanned images, DTM elevation data, aerotriangulation data or the ortho-