Checklists for Consultant Survey Reviews

The following checklists will be used as a guide by the Montana Department of Transportation (MDT) when reviewing surveys completed by consultants. The intention of these checklists is to facilitate good communication and establish expectations; the items contained herein are not considered contract-binding as the only items to be reviewed. For further details on any of the points below, refer to the *MDT Survey Manual*, the *Guideline and Summary of Requirements for MDT Surveying*, or contact MDT Consultant Design or MDT Photogrammetry & Survey.

Control Survey Review

- ☐ Review submittal to ensure all deliverables have been provided
    - o control plan
    - o original field survey notes
    - o supporting data/calculations
    - o level data files and peg test
    - o research materials
    - o control diagrams
    - o electronic coordinate files (ASCII format)
    - o data collector files
    - o ASCII point recovery description files
    - o GPS/GNSS files
- ☐ Review ASCII files for format and content
- ☐ Review units, datums and adjustment tags
- ☐ Review observation logs
- ☐ Review network adjustment reports
- ☐ Check for trivial vectors included in adjustment
- ☐ Check GNSS loop closure results to ensure they meet MDT standards
- ☐ Check redundant baselines to ensure they meet MDT standards
- ☐ Check that all filenames meet MDT file naming convention
- ☐ Check that MDT point numbering convention was followed
- ☐ Check for PLS seal and signature on control diagram

Engineering Survey Review

- ☐ Review submittal to ensure all deliverables have been provided
    - o original field survey notes
    - o supporting data/calculations
    - o research materials
    - o electronic coordinate files (ASCII format)
    - o data collector files
    - o final engineering/topographic maps in Microstation and Geopak format
    - o GPS/GNSS files
- ☐ Review units, datum and adjustment tag
- ☐ Review calibration baseline report and peg test if applicable
- ☐ Review the DGN and GPK files submitted (correct features, line types, etc.)
- ☐ Review the tin file for errors
- ☐ Make sure all deliverables were submitted and match the DGN and GPK files that were submitted

Checklists for Consultant Survey Reviews

- ☐ Make sure all data tied to the project control network
- ☐ Check that all filenames meet MDT file naming convention
- ☐ Check that MDT point numbering convention was followed
- ☐ Check for PLS or PE seal and signature on statement that the survey meets MDT standards

Cadastral Survey Review

- ☐ Review submittal to ensure all deliverables have been provided
    - o certificates of survey
    - o corner recordations
    - o original field survey notes
    - o supporting data/calculations
    - o research materials
    - o electronic coordinate files (ASCII format)
    - o data collector files
    - o GPS/GNSS files
- ☐ Review units, datums and adjustment tags
- ☐ Review the DGN and GPK files submitted (correct features, line types, etc.)
- ☐ Review and compare existing R/W plans with submittal
- ☐ Make sure all deliverables were submitted and match the DGN and GPK files that were submitted
- ☐ Make sure all data tied to the project control network
- ☐ Make sure correct procedures were used to locate or establish all property-controlling corners
- ☐ Make sure that all deliverables meet MDT and State standards
- ☐ Check that all filenames meet MDT file naming convention
- ☐ Check that MDT point numbering convention was followed