MACHINE CONTROL

Obtaining the Files


FAIL


FAIL

Supplemental Design Data (SDD)

- SDD files are what the Contractor will use to setup the automated machine control guidance systems on the project.

Supplemental Design Data (SDD)

- All Major Grading Projects with Full Survey
- Located on the ftp site
- On the Plans and Proposals page the bottom document of applicable projects there will be a SDDD.pdf (Supplemental Design Data Disclaimer)

Supplemental Design Data Disclaimer

- Clicking of this provides them with:
  - A link to the ftp site
  - A generic User Name and Password.
  - As well as informing them that by using the files they are agreeing to the following Disclaimer.

Disclaimer

Supplemental Design Data Disclaimer:

- The Department of Transportation (NDDOT) provides supplemental design data (SDD) on an "as is" basis. SDD is information used or generated by the NDDOT that is not included in the Contract. Electronic design files that are not specifically part of the ePlans shall be considered SDD. SDD includes both paper and electronic formats.
- Under no circumstances does NDDOT warrant or certify SDD to be free of errors or deficiencies of any kind. NDDOT specifically disclaims all warranties, express or implied, including but not limited to the warranties of merchantability and fitness for a particular purpose.
- The use of any SDD for work which is under contract with the NDDOT, does not relieve the user from any obligations assumed by the contract, or from complete and proper fulfillment of the terms of the contract, nor does it entitle the user to compensation for damages of loss which could be attributed to such use.
- SDD is subject to change by NDDOT. Anyone relying on this information should satisfy himself/herself as to the most current version. The user agrees to accept all risks and consequences flowing from or related to the use, retention, distribution, alteration, or deletion of this information. NDDOT will in no instance be liable for any loss of profit or other damage, including but not limited to special, incidental, consequential, or other damages, even if apprised of the likelihood of such damages.

Typical SDD Info

- Surfaces
- Raw gpk file
- Simplified AAreadme file
- Drawings

Surfaces

- Existing Surface – tin, dtm, and or xml
- If XS's were created with Roadway Designer the following should also be included.
  1. Proposed Surface – tin, dtm, and or xml
  2. 3d break lines (Styles) as drawing file.
  3. Surface components (Model) as drawing file.

Exporting surfaces to an xml is usually minor additional work and should be done for contractors. Creating a proposed surface from XS's generated from Geopak criteria is usually not done for contractors.

Raw gpk File

- If Roadway Designer is used, the Inroads alg file should also be included.

Simplified aareadme File

- The designer should have a comprehensive aareadme file for the project. All of the alignment information (key or general description) from the comprehensive file should be copied into a simplified aareadme file and posted for the contractor.

Drawings

- Control
- Design
- DS_Align
- Profile
- RW_Bndry
- Topog
- XSEC

Special Provisions

- SOIA-7-085(034)240 (grading job bid 3/22/13)
  - SP 1063(08) Automated Machine Guidance (AMG) Construction
    - State will set up control points approximately 1 per mile, ~1000’ outside the project corridor
    - Contractor sets up intermediate points as necessary
    - Contractor required equipment with AMG;
      - 1 Motor Grader
      - 1 Dozer
      - 1 Scraper

Troubleshooting

- International Foot vs. U.S. Foot
- NAVD88 vs. NGVD29
- Calibration of Equipment

Preventable Problems

Questions?

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Engineer or Redneck?