

# MISSOURI DEPARTMENT OF TRANSPORTATION (MoDOT)

## Specifications for Delivery of Electronic Design Data

Effective November, 2005 Letting

### General Requirements

The Missouri Department of Transportation uses MicroStation version 8.5 for highway, bridge design and drafting. Highway design surveys and road design computation shall be achieved by using the GEOPAK software.

### Delivery of Electronic Design Data from Consultant Contracts.

Consultant contracts shall continue to be in compliance with the Specifications of Computer Deliverable Contract Plans stated in the Project Development Manual Section 4-01.3 (4). In addition, to those requirements, the consultant shall deliver two additional CD ROMs.

The first CD-ROM shall be labeled "Electronic Design Data for MoDOT Project Office", and shall contain the following electronic design files.

1. Final GEOPAK coordinate geometry database file (.gpk) containing all final chains, profile, control points, special profiles, and other elements needed to construct the final plans. The chains and profiles shall have names pertaining to the items they represent. Documentation of all chains and profiles are to be supplied in an ASCII text file as described in paragraph 5 of this section.
2. All contract plan drawings for an entire project as MicroStation files (.dgn) including all reference drawings containing both existing and proposed plan and/or profile view geometry.
3. All GEOPAK cross section drawings (.dgn) containing GEOPAK cross section cells, existing ground line and any subsurface geometry, proposed template including proposed finish grade and all pavement and aggregate layers.
4. All Microstation cross-section drawings (.dgn) containing the cross-section geometry, sheet borders and earthwork end areas/volume notes. The cross sections in the sheets shall match their equivalent GEOPAK cross-section drawing.
5. A text file describing the contents including project name, drawing names, and coordinate geometry descriptions. This file shall be named CONTENTS.TXT and be located in the root directory of the disk.

The second CD-ROM shall be labeled “Electronic Design Data for Contractor GPS Grading”, and shall contain the following electronic design files.

1. Final GEOPAK coordinate geometry database file (.gpk) containing all final chains, profile, control points, special profiles, and other elements needed to construct the final plans. The chains and profiles shall have names pertaining to the items they represent. Documentation of all chains and profiles are to be supplied in an ASCII text file as described in paragraph 5 of this section.
2. Contract plan view drawings showing “strip map” proposed geometry as MicroStation files (.dgn).
3. All main alignment (including ramps) GEOPAK cross section drawings (.dgn) containing GEOPAK cross section cells, existing ground line and proposed template including proposed finish grade and all pavement and aggregate layers. Any sub-surfaces such as rock lines, etc. shall be removed from this file.
4. A GEOPAK XS-List report (.xsr) for each alignment.
5. The ASCII text file including superelevation transition stations, i.e. pattern\_shape.inp file.
6. A text file describing the contents including project name, drawing names, and coordinate geometry descriptions. This file shall be named CONTENTS.TXT and be located in the root directory of the disk.

Consultants shall turn in the two CD-ROMs to the district project manager at the time they submit their plans. The project manager shall be responsible for sending the first CD labeled “Electronic Design Data for MoDOT Project Office” to the appropriate construction office. The second CD labeled “Electronic Design Data for Contractor GPS Grading” shall be submitted to the Central Office at the time plans are due.

Send the CD labeled “Electronic Design Data for Contractor GPS Grading” to:

CADD Support  
601 West Main  
Jefferson City, MO 65101  
Attention: Alexa Mitchell  
RE: Electronic Deliverables