

DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION

P.O. BOX 191 COLUMBIA, S.C. 29202

DANIEL P. FANNING EXECUTIVE DIRECTOR

INSTRUCTIONAL BULLETIN NO. 94-5

SUBJECT: Drainage Design/NPDES CADD Procedures For Consultants

EFFECTIVE DATE: April 1, 1994

SUPERSEDES: New

RE: None

Superseded by 1999-3

Consultant should follow the SCDOT Highway Design Manual guidelines for CADD plan preparation with the following adjustments for Drainage and NPDES CADD plans.

MEDIA

South Carolina Department of Transportation design files will be supplied from Road Design to the Consultant through the Department's Hydraulic Engineer on QIC-80 tape or 3.5" floppy diskettes in DOS Microstation format. Except for special request by the Consultant, the media will be QIC-80 tape unless all information can fit on two or less high density 3.5" floppy disks. Also provided will be a bond hard copy of the plan sheets. The Consultant will return files to the Department's Hydraulic Engineer in the same format and media. Cross sections will be supplied to the Consultant on bond paper hard copy format and not electronically, unless the Consultant makes a special request and is able to accept electronic cross sections that where generated by the Department's roadway design software.

MISCELLANEOUS INFORMATION

Printouts of existing drainage elevations, outfall ditches and any other pertinent information will be supplied to the Hydraulic Engineer by the Department's Road Design Section as needed.

FILE NAMING CONVENTION

Consultants will be supplied two design files with the naming guidelines of c1234pp.dgn and c1234pf.dgn, where the "c" is for consultant, the numbers represent the projects pin number, and "pp" or "pf" stands for plan and property, or plot file, respectfully. Any border design file reference files, not previously supplied, will be included as needed for each project.

LEVELS - SYMBOLOGY - GUIDELINES

Consultants will follow the SCDOT Level Chart when adding new design elements or text labeling to these design files.

All new pipe will be placed on lv=34, wt=15 in design file c1234pp.dgn. New drainage structures and outfall ditches are placed on lv=35, wt=2 in design file c1234pp.dgn. Notes and descriptions for new pipe, drainage structures and outfall ditches should be placed on lv=36, wt=4 in design file c1234pf.dgn.

NPDES items should be placed on lv=37, wt=2 in design file c1234pp.dgn and text labeling of these items should be placed on lv=38, wt=2 in design file c1234pf.dgn. This leveling scheme follows our standard file setup of adding new design elements to the *pp.dgn file and any text labeling to the *pf.dgn file which will allow us to merge your additions to our original design files upon return to the Department.

Consultants should not modify, change or delete any elements in these design files, except on your assigned levels, unless special permission is obtained from SCDOT Road Design Section. Consultants should also not change files working units, global origin or coordinates.

NON-CADD PROJECTS

In the event SCDOT cannot supply CADD files for a project, bond hard copies of the plans will be provided. Consultants should add new pipe, drainage structures, outfall ditches and notes to plan sheets in red and new NPDES items and text in green. Department personnel will place those new additions onto the original plans upon return to Road Design.

Drainage Design and NPDES can be shown on the same plan sheet on small, uncongested plans; but, for clarity, it is recommended to show these items on different plan sheets.

QUANTITIES

Estimated quantities for added design and NPDES must be shown on the standard "Summary of Estimated Quantities" plan sheet. Quantities not detailed on the plan sheets are to be shown in the "General Construction Note" in the plans.

INSTRUCTIONAL BULLETIN NO. 94-5 April 1, 1994 Page III

Approved:

E. SÆargle Road Engineer-Design

ESE/LOK/NPY/jb

cc:

Road Design (2)