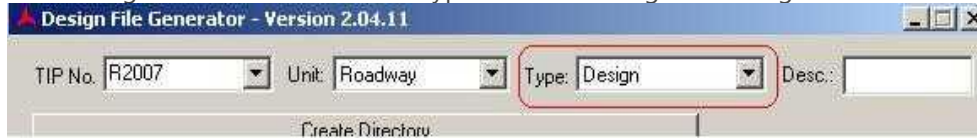**16_03 Automatic Design File Filters**

Update:
Roadway CADD Support has introduced a Microstation VBA program to automatically select the applicable level filter based on the type of file you are opening. This automation reinforces our standard file naming convention and the file type entered through the Design File Generator program.

Note that the term "file type" used here is not The Industry Standard definition. All Microstation file is registered with a DGN extension. The System recognized this file type as a Microstation application. In terms of NCDOT standard file naming convention, file type is defined as the third set of character string in a standard Microstation file name. For example;
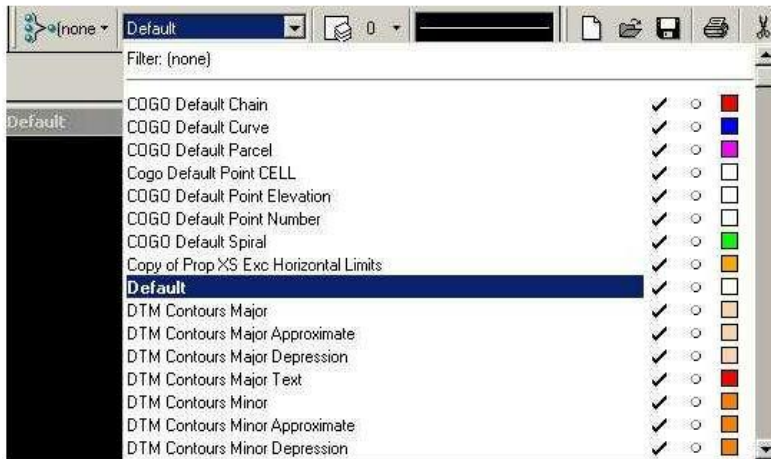
R2007_RDY_**XSC**_L.DGN

This is a Microstation cross section file base on the 'XSC' file type designation in the file name. This is important because the program will focus on the third set of character string and will only work if the standard naming convention has been used. Having said that the following table describes the correlation between NCDOT Roadway file type and the corresponding filter when opening Microstation files with MS_Start.

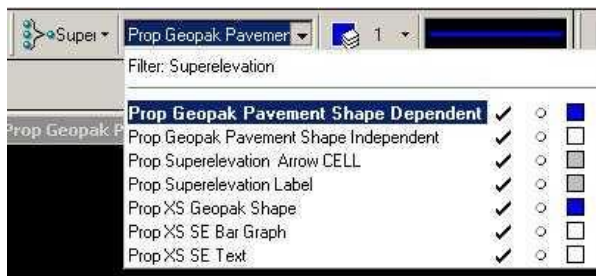| TYPE	FILTER
DSN	DESIGN
EOP	EOP
EST	ESTIMATE
PAT	PATTERN LINE
PFL	PROFILE
PHM	PUBLIC HEARING MAP
ROW	ROW
SHP	SUPERELEVATION
SPD	SHEAR POINT DIAGRAM
SS	SLOPE STAKE
TYP	TYPICAL SECTION
XPL	X-SECTION
XSC	X-SECTION

Here is a quick demonstration to show the advantages using this kind of automation.
Without automation (code name RD_SyncStart), when opening a shape file to create a Geopak shape, the number of available levels for Microstation and Geopak processes are over 727 levels.

With RD_SyncStart, when opening a shape file to create a Geopak shape, now the number of available levels for Microstation and Geopak processes has drastically dropped to only seven (7).

Note that once the file is opened, Designer can still select any filter desired. The main focus of Roadway CADD Support concern is to eliminate unnecessary levels while running Geopak processes. While most of Microstation processes are moving into an object oriented interface and putting less emphasis on levels, most of Geopak processes still require manual Designer input of levels. Reducing the number of levels with filters can help this cause and speed up plan production efficiency.