

# *Sign Manager* User Manual

Updated, January 2002 by Debra Stokes, Sign Manager Liaison

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If you find mistakes or have suggestions to improve the manual,  
please send them to: [debra.j.stokes@mvn02.usace.army.mil](mailto:debra.j.stokes@mvn02.usace.army.mil)

## Foreword

This software has been developed to assist in the management of new or existing inventories of your sign program. This program contains all the information that is in the Sign Standard Manuals. To eliminate the most common problems and obstacles in maintaining a sign program, the following goals were set:

### Goals

- Reduce the time-consuming process of adding/creating new signs to an inventory.
- Eliminate or diminish paperwork created when updating an inventory for maintenance or replacement.
- Allow easy access to any sign with any configuration in the inventory.
- Include a catalog which generates sign specifications as specified in the manual, eliminating possible errors and/or modification of standards.
- Calculate legends automatically and generate sign panel sizes.

### Program functions

The program consists of four individual sections each performing a specific function. First, the Inventory is the default startup position. It will generate a hierarchical framework to store the folders and the database, and keep track of the necessary links between the different parts of the Inventory and other program parts. All other parts of the program must be accessed through the **Inventory** using the “Transfer” menu (described later in more detail). Second is the **Catalog**, containing over 90 different sign type configurations with generic sign layout diagrams, listed in a hierarchical format to make selection easier. When selecting a specific sign type, it will transfer to **Specifications** which generates the appropriate sign specifications. Sign specifications can then be modified, within the restraints of the sign type selection, to suit particular needs. Finally, the **Order** generates sign orders from the Inventory. Orders can be exported and merged to combine orders at a district level.

If you have any comments, additions or suggestions, please send them to Debra Stokes, *Sign Manager* Software Liaison, New Orleans District, ATTN: CEMVN-OD-T, P.O. Box 60267, New Orleans, Louisiana 70160-0267, 504-862-1344.

## How to Get Started

Best case scenario when starting your sign program is to do a physical inventory of all signs currently installed on the project first. However, in the real world, most people get into *Sign Manager* because they have to order signs. You cannot order a sign that is not in your inventory because the Orders section of the software uses that inventory as its database. This is important to remember because any changes you make to a sign while in the Orders section will be reflected in the inventory.

The tutorial will show you how to create an inventory. If you are in the situation where you must order signs before doing a routine inventory, create the inventory with the signs you need to order and add to it at a later date.

# **Chapter One**

## **General Introduction**

Think of *Sign Manager* as a file cabinet. The entire cabinet is the district or “Level 1.” Each drawer is an individual field project or “Level 2.” In each drawer are folders that are the areas you create, e.g., each recreation area or, a specific area of a lock. This is “Level 3.” In each folder are individual pieces of paper; the signs that are found in that recreation area or portion of the project. This is “Level 4.”

## Use of the manual

To become familiar with *Sign Manager*, it is recommended that you read the first chapter of the manual and take the step-by-step tutorial in Chapter Two before attempting to use the program. It will be useful to have the Sign Standards Manual ready for reference, but it is not required since help files (if installed) will supply all necessary information.

The manual has been divided into six chapters; first, a general chapter to become familiar with the package. Chapter Two gives step-by-step instructions on how to move around in the program, giving you an idea of what the capabilities and possibilities of the program are. Chapters Three to Six discuss four separate program parts: Inventory, Catalog, Specifications, and Orders.

Each one of these chapters includes a description of screen displays and menu commands for that particular program section. Finally, there are some Appendices at the end of the manual for additional, detailed and technical information on specific subjects.

Also enclosed is an index (page 65) and glossary (page 2) to help you find information on specific subjects quickly.

## Installation

**Important:** This program creates and uses specific directory and file names and configurations. Therefore, **do not** copy the program manually or in any way other than using the provided installation program. Do not change the configuration, contents or file name of the programs and system files that are copied or created in the new directories unless you are using the *Sign Manager* program. Otherwise, errors and possible irreversible damage to inventory files may result.

The latest version of *Sign Manager* is 2.2.2, dated 1993 and is on three 5¼” disks.

### Using Windows

**5¼ disks:** At the DOS prompt: insert the supplied disk marked “Program Disk No. 1” into the “A:” disk drive and type “A:install”. Follow the on-screen instructions to install the programs and files on your hard disk.

**3½ disk:** the directions are the same as above except when the installation program asks for the next disk. Just press <ENTER> and the installation will continue.

### Create a shortcut icon for your desktop

Go to Start, Run and browse to the SM directory. Use the right mouse button and click on SM.EXE. Select *create shortcut*. Click and a shortcut is created in that directory. Use the right mouse button again to click on the shortcut. “Send” it to your desktop/

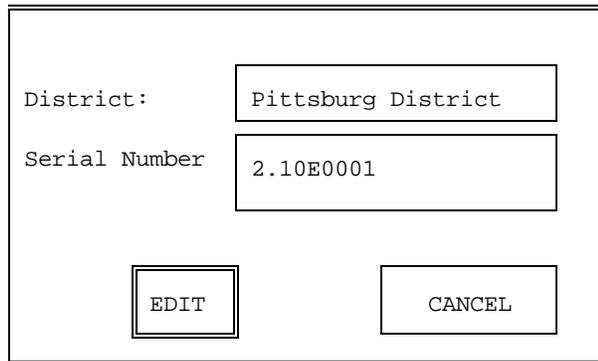
### Start the program

· *Start up the program by typing “SM” from DOS*  
*Sign Manager* will run in Windows if your computer has enough memory. You can even create a shortcut icon for your desktop. Check with your district IMO staff.

When the program is run for the first time, a dialog box will appear, asking for the district name and serial number. The cursor is now located in the first field named "District :".

· *Type in your district name and press <Tab> or <Enter>*

The cursor will jump into the next field. If you make a mistake typing and have already proceeded to the second field, you can press the <Tab> key until the cursor is located again in the first field. Correct the mistake and proceed to the second field by pressing <Tab>. The cursor is now blinking in the second field. The serial number can be found on the flap of the envelope in which the program diskettes were shipped. It must be entered **exactly** the way it is found here or on the envelope. This number has one capital letter and uses four zeros.



District:	Pittsburg District
Serial Number	2.10E0001
EDIT	CANCEL

Sample screen appearance at initiation of the program.

## Basics

Never create a sign using all capital letters for the message. This will cause you delays in getting your signs because UNICOR will return your order forms.

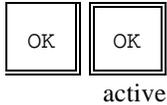
*Sign Manager* is not in Windows format. This means you cannot use your mouse.

# Glossary of Terms

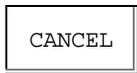
**Alert box** A box that appears on the screen to give a warning or to report an error message. The warning is accompanied by a beep.

**Arrow keys** The four directional keys on the keyboard that, when pressed, move the cursor. Sometimes called Cursor keys. Notations for these keys are <Left>, <Right>, <Up>, and <Dn>.

**Backspace Key** A key that moves the insertion point backward, removing the previously typed character.



**Button** A push button-like image in dialog boxes where you designate, confirm, or cancel an action. An active button is surrounded by a double lined box. An inactive button by a single line box. To select a button, use the <Tab> key until the button is active (double lined box with the cursor blinking) and press <Enter>.



**Cancel button** A button that appears in a dialog box. Pressing it cancels the command. A shortcut is usually the <Esc> key.

**Choose** To pick a command, menu or file/folder. You often choose a file to act on, after you've selected a command. For example, select the "Open" command in the "File" menu and then choose a file.

**Command** A word or phrase, usually in a menu, describing an action for the program to perform.

Typeover Curs\_r  
Insert Cursor

**Cursor** The insertion point when editing or a highlighted item. When used for text entry, the cursor can have two modes. The first is an insert mode where characters typed at the cursor point are inserted. The second is an typeover mode where the character at the cursor point is replaced by the keystroke. To toggle between the two modes use the <Insert> key. When highlighting an item, the cursor indicates the subject of the desired action, command, etc.

**Delete Key** A key that removes the current selection or next character after the cursor point.

**Dialog Box** A box that contains a message requesting more information from you. A dialog box can contain a field, button, selection or text. To move from item to item, use the <Tab> key. Sometimes the message is a warning that you are asking the program to do something it cannot do, or that you are about to destroy some information. In these cases~ the message is often accompanied by a beep. To cancel a dialog box, press the <Escape> key or select the "Cancel" button. Compare to alert box.



**Dimmed Command/File** A command/file that appears gray rather than black/white is unavailable/locked at the moment. In the example to the left, only four out of the possible nine choices are available. In another example, at Level 5 in the Inventory, the "Data" menu title is dimmed. At this level, only one file is shown in the window and thus there is no data to sort. Dimmed commands are updated automatically and cannot be modified. Dimmed files can be (un)locked using the "Secure" command in the "File" menu.

**File** Any collection of information stored on a disk in a document, a folder, or system file.

Project :

Project Name
-----------------

**Field** A rectangular boxed area in the dialog box where information can be entered or selected. Usually preceded by a title to identify the entered information.

**Folder** A holder of files or other folders. Folders allow you to organize information in any way you want. A district folder contains project folders. A project folder contains location folders. A location folder contains signs.

**Hierarchical file system** Used to organize the information in the inventory and present the sign types in the Catalog in an orderly fashion (see folder). For example, to select a symbol sign in the Catalog, you first select the "Recreation" menu, then the "Symbol" sub-menu and finally the "Symbol Identification Sign".

**Highlight** To make something visually distinct from its background, usually to show that it has been selected or chosen.

**Hot Keys** See "Quick Access".

**Keys** All actual key strokes on the keyboard have been identified by this symbol: <Keystroke>.

**Keyboard shortcut** A keystroke that you can use instead of a cursor action to perform a task. For example, pressing <F2> is the same as choosing the "Open" command from the "File" menu. Shortcuts are listed in the key bar at the bottom of the screen.

**Lock** To prevent documents from being edited, discarded, or renamed.

**Matrix box** A box that contains a table of sign specifications for a specific sign type. The matrix box is activated when editing sign specifications in the Specifications section of the program. When specifications are linked to each other, the matrix box will be shown to select a set of specifications. The specifications that are active for the opened file will be highlighted. To move from item to item use the <Up> and <Dn> keys. To cancel a matrix box, press <Esc> or select the "Cancel" button. Compare to dialog box.

Matrix						
-A/M-	-Spec-	-Panel Size-	-HAGL-	-Mounting-	- Post-	-Qty-
5 "	LU-05	" x 7.33 "	0 "	round	" x 4 "	
.5 "	HDO-05	6 " x 7.33 "	60 "	Ground	4 " x 4 "	1
.75 "	ALU-05	9 " x 11 "	60 "	Ground	4 " x 4 "	1
.75 "	HDO-05	9 " x 11 "	60 "	Ground	4 " x 4 "	1

Viewing Distance: 25' Preferred (A): 0.8929" Preferred (M): 0.4464"  
 Selected : 14' Selected (A): 0.5000" Selected (M): 0.5000"

NEXT

OK

CANCEL



**Menu** A list of commands that appears when you select the menu title in the menu bar. Pressing <Enter> while a command is highlighted or pressing the highlighted letter for the command chooses that command.

**Menu Bar** The horizontal strip at the top of the screen that contains menu titles.

**Menu Title** A word or phrase in the menu bar that designates one menu. Selecting the menu title causes the title to be highlighted and its menu to appear below it.

**Numeric keypad** The set of keys on the right side of the keyboard that lets you move the cursor when the <Scroll-Lock> is off.

**Progression Box** Indicates the progression of the command currently executed (printing, exporting, etc.) This way you know that something is actually happening.

**Quick Access** To move quickly through the program, “Hot Keys” have been added to select menus, commands, “button” commands and files. The first three items usually have a red highlighted letter that indicates the “Hot Key”. The first letter of each sign type in the Specifications section is a hot key even though it is not red. Files do not have a highlighted letter, but can be active.

**Save** To store information from memory into a file. Information is stored in the file automatically when editing or creating a new sign in the Specifications section. Here a “Save” or “Save as” command must be issued to save the sign (changes). Before discarding a new or modified sign, the program will ask you whether or not you would like to save the sign currently in memory.

**Scrollbar** Vertical bar on the right side or bottom of the window, used to move the contents of a window, or a list in a dialog box, by using the <PgUp>, <PgDn> or cursor keys. Scrollbars are automatically activated when more information is available than can currently be displayed in the window/field. A “Scrollbar” is active if the “Scrollbox” is shown. These are most commonly found in the Catalog section.

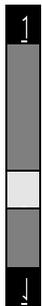
**Secure** See “Lock”.

**Tab Key** A key that, when pressed, moves the cursor to the next field, button or selection.

**Title Bar** The horizontal bar above the window that shows the name of the current file.

**Tutorial** A set of step-by-step instructions designed to teach you skills.

**Window** An area that displays file contents on the screen. You view files through a window. You can open or close a window, edit its contents and scroll through it.



## Screen display

The screen is built up in four sections. The top line shows the menu bar containing the pull down menus for that particular program section. To activate these menus, you can move the cursor to the desired menu title and press the <Enter>, <Up> or <Down> key. The pull-down menu will be displayed and a command can be selected. "Hot keys" for menus and commands are provided with highlighted letters (usually the first) in the menu title or command. For example, pressing <S> or <s> is the same as choosing the "System" menu title. Keyboard short cuts for commands are listed in the key bar at the bottom of the screen. For example, pressing <F10> is the same as choosing the "Quit" command in the "System" menu.

The second section is the title bar underneath the menu bar, which indicates the currently opened file or active program section. File names consist of a path name, file name and extension (C:\SM\PROJECTS\PROJECTS.INV).

The third section is the file window, varying from program part to program part. The Inventory displays the inventory files. The Catalog lists all sign types with a generic layout. The Specifications section shows specification and data files, and the Order section shows order files. Some windows may have a "scrollbar" depending on the kind and quantity of information displayed.

Finally the fourth section, a key bar at the bottom of the screen, indicates which (function) keys can be used at a particular time for which command.

Menu bar  
Title bar

Window

Summary Window

Key bar

<b>F</b> ile	<b>D</b> ata	<b>V</b> iew	<b>T</b> ransfer	<b>U</b> tilities	<b>S</b> ystem					<b>F1=H</b> elp
C:\SM\PROJECTS\PROJECTS.INV										
Project				Fls	Total	C	N	O	P	S
North Creek			01-22-1998	4	42	25	0	14	0	3
Level 2				Fls	Total	C	N	O	P	S
District : Pittsburgh				1	471	157	124	7	150	33
District										
Project :										
Location :										
<b>F1</b> Help	<b>F3</b> Edit	<b>F5</b> Summarize	<b>F7</b> Next	<b>F9</b> Pause	<b>Esc</b> Close	<b>F2</b>				
Open	<b>F4</b> Print	<b>F6</b> Find	<b>F8</b> Previous	<b>F10</b> Quit	↓	Select				

Sample screen appearance in Level 2 of Inventory.

## Default settings

Before taking the step-by-step tutorial, make sure your program has been properly installed. For the purpose of this tutorial the following default settings will be used.

Hard disk drive where program is installed on: C

Program directory: \SM

Floppy disk drive: A

All text preceded by a bullet (·) and noted in *Italic* indicates an action to be performed by the user. Follow these instructions closely and type words or commands exactly as noted.

### Insert/overstrike

*Note: When entering information, you can toggle between “Insert” and “Overstrike” mode by pressing the <Insert> key. You can see the shape of the cursor change from a line (“Insert” mode) to a square (“Overstrike” mode).*

· *Type the correct program serial number to gain access to the Sign Manager*

The serial number is **2.10E0001** and is located on the original program disk label. These are zeros, not O’s. Type it exactly as it is here.

To proceed you can do either of two things. Each dialog box has an active button, indicated with double lines around its contour. Pressing the <Enter> key will execute the active button command.

### “OK” button command

· *Press <Enter> to execute the “OK” button command, indicating that entry is finished*  
or

· *Press the <Tab> key until the cursor is blinking in the button command. Pressing <Enter> will then execute the button command*



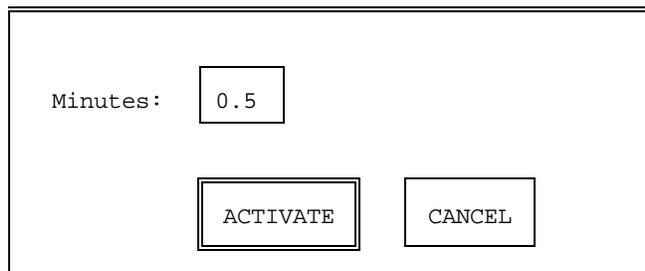
Similarly, if you would like to cancel a dialog box, simply press the <Escape> key, or position the cursor on the “Cancel” button using the <Tab> key and press <Enter> to execute the “Cancel” button.

After executing the “OK” button command, the copyright screen will appear. The next time you startup, this will be the first screen displayed.

*Note: If the current date is invalid (00-00-0000 or < 1990), you will be asked to enter the correct date.*

### Pause window

At any time during a session, you may see the *Sign Manager* pause window, displaying the current program version, program section, and current time. This pause screen will be activated after a certain period of time.



Sample screen appearance of system Pause.

This was unfortunately set to default at 0.5 minute. This will drive you crazy within the first two minutes. I highly recommend you change it now.

To change the window activation time,

· *Move the cursor to the “System” menu by using the <Left> and <Right> cursor keys. When the menu title is highlighted,*

· *Press <Enter>, <Up>, or <Down> to activate the menu.*

The menu will be opened and the Pause command is the seventh (7th) command listed.

· *Move the cursor to the command using the <Up> or <Down> keys and press <Enter> when the command is highlighted, or type the hot key “P” for the “Pause” command.*

The screen will display a dialog box with field indicating “minutes:”. Enter the appropriate time you wish to use before activating the pause screen, and press <Enter>. To de-activate the pause screen, enter a value of 0.

· *Press any key to continue to return to normal execution.*

# **Chapter Two**

## **Tutorial**

## Building an inventory

The Inventory will be shown on the first level. This first screen shows a menu bar with menu titles, a title bar displaying the current Inventory database path (C:\SM\PROJECTS\), a window displaying the district folder with district name and quantity of signs, a summary window (empty on Level 1) indicating the current level of the Inventory, and a key bar showing the active keys and their specific use.

To manipulate files in the district (create, edit, print, etc.), you will need to open the district folder to take a look at the enclosed files.

· To do this, move the cursor in the menu bar to the menu title “File” (shortcut= type “F”)

· Activate the menu by pressing <Enter>, <Up>, or <Down>

The “File” menu will display all commands relating to manipulating files/folders.

### Open district file

· Select the “Open” command to display all projects and press <Enter>

A short cut for this is pressing the <F2> function key (listed in the key bar at the bottom of the screen).

### Level 2; Project display

Opening the folder will take you to Level 2 of the Inventory. The screen will display a new title bar of the file just opened (C:\SM\PROJECTS\PROJECTS.INV) and a corresponding window displaying all projects (none, if it is the first time *Sign Manager* has been used). The summary window has been updated; the level is upgraded to two and the district folder is displayed. You are now ready to create the framework for particular projects. To show this process, you will create a tutorial project named “North Creek”. The project contains all crucial sign types necessary to get acquainted with the program. The tutorial project consists of a visitor center and boat ramp. After entering the sign inventory, you will create an order and backup your files.

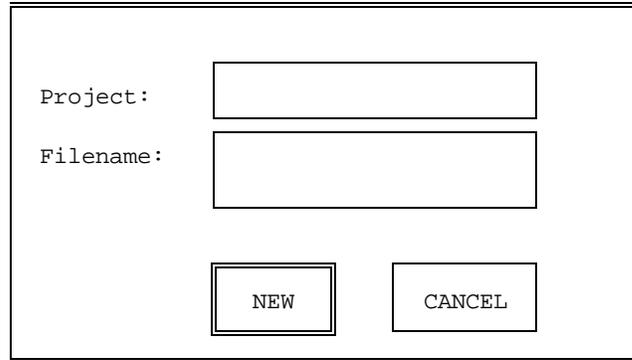
File	Data	View	Transfer	Utilities	System	F1=Help				
			- C:\SM\PROJECTS\PROJECTS.INV							
Project			Fls	Total	C	N	O	P	S	
				0	0	0	0	0	0	
Level 2			Fls	Total	C	N	O	P	S	
District :	Pittsburgh District		1	0	0	0	0	0	0	
Project :										
Location :										
<b>F1</b> Help	<b>F3</b> Edit	<b>F5</b> Reports	<b>F7</b> Next	<b>F9</b> Pause	<b>Esc</b> Close	<b>F2</b>				
Open	<b>F4</b> Print	<b>F6</b> Find	<b>F8</b> Previous	<b>F10</b> Quit	↓ Select					

Sample screen appearance in Level 2 of Inventory.

**Create a new project**

· Select the “New” command in the “File” menu

A dialog box will appear asking for a project name and a file name for the document you are about to create.



The dialog box contains two text input fields. The first is labeled "Project:" and the second is labeled "Filename:". Below these fields are two buttons: "NEW" and "CANCEL".

**Project name**

· Enter the project name (in this case type, “North Creek”) and press <Enter> or <Tab>

Since both fields have to be entered with information, the <Enter> key will not activate the “New” button, but will jump the cursor to the next field.

**Project file name**

· Type the file name (in this case “NCREEK”) and press <Enter>

(File names will automatically appear in upper case, and are limited to alpha numeric characters, no spaces allowed.) Before the file is created, the current district will be checked for duplicate file names. The document will appear in the window and the summary window will be updated; the district folder will indicate that one (1) file is currently resident. To create the areas where signs are located, open the project file.

**Open project file**

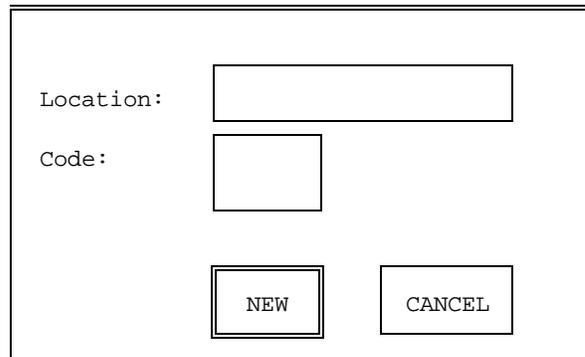
· Choose the “Open” command in the “File” menu

If North Creek is the only project in the district file, the program will automatically open it. If there are more projects resident, you will have to select North Creek and press <Enter>. The North Creek project is displayed in the window. The title bar now indicates the newly created file “NCREEK.INV” and the summary window displays the project name “North Creek”. You are now at Level 3 where area locations are created.

**Create new locations**

· Choose the “New” command in the “File” menu

A dialog box will appear, asking for a location and code name.



The dialog box contains two text input fields. The first is labeled "Location:" and the second is labeled "Code:". Below these fields are two buttons: "NEW" and "CANCEL".

**Location name and file name**

· Enter "Visitor Center" for location and "VC" for code name  
(Code names will automatically appear in upper case and are limited to alpha numeric characters, no spaces allowed.)

*Note: Never use "INV" for the code name.*

Sign Manager uses .INV to designate program files. If you use .INV also, the program will be confused and will not work properly.

· Press <Enter> when finished

The file is created and displayed in the window.

· Choose the "New" command in the "File" menu and use the same procedure to create a second location named "Boat Ramp" with file name "BTR"

The summary window will now indicate that there are two (2) files in the North Creek project. You will notice that the "Boat Ramp" file is inserted before the "Visitor Center" file because it has been sorted according to the sort criteria in the "Data" menu.

**Sort project file**

· Choose the "Data" menu by pressing "D"

The menu will list six (6) different sorting criteria that can be used to arrange the locations in the "Tutorial Project" folder. Once a file has been sorted, it will stay in that order until another sort criteria is chosen.

**Ascending, descending**

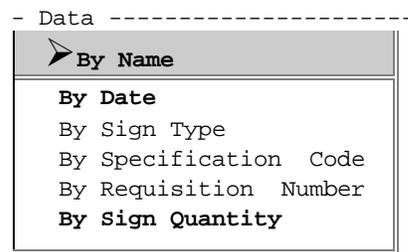
· Select the "By Name" command, and press <Enter>

A dialog box will ask you in what order you would like to sort the data (ascending or descending). Press "D" for Descending order. The two files will now be listed in reverse.

· Choose the Data menu again

**Data menu arrow**

You will see that an arrow is located at the beginning of the "By Name" sorting command. This indicates the latest sorting command executed (if no arrow is shown, the file is sorted alphabetically, the default criteria.)



**Open location file**

· Press the <Esc> key to return to the menu bar

· Choose the "Open" command in the "File" menu

The cursor will move inside the window highlighting the "Visitor Center".

· Press <Enter> to select this file

The file will be opened and displayed in the window. The title bar now indicates

“NCREEK.VC” as the file name, and the summary window is updated with the location name and “Level 4”. At this point you have been building a framework to put signs into. Once you are in a particular area location, you can start entering and saving signs

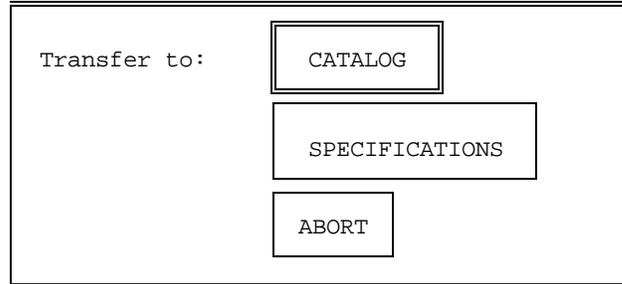
**Entering a new sign**

To enter signs, transfer to the Catalog to make a sign selection. Transferring can be done by either choosing the “Catalog” command in the “Transfer” menu at Level 4 or 5, or as you will now do, by selecting “New” in the “File” menu at Level 4.

**Sign catalog**

· Select “New” in the “File” menu

A dialog box will appear asking for a transfer to either the Catalog or Specifications section.



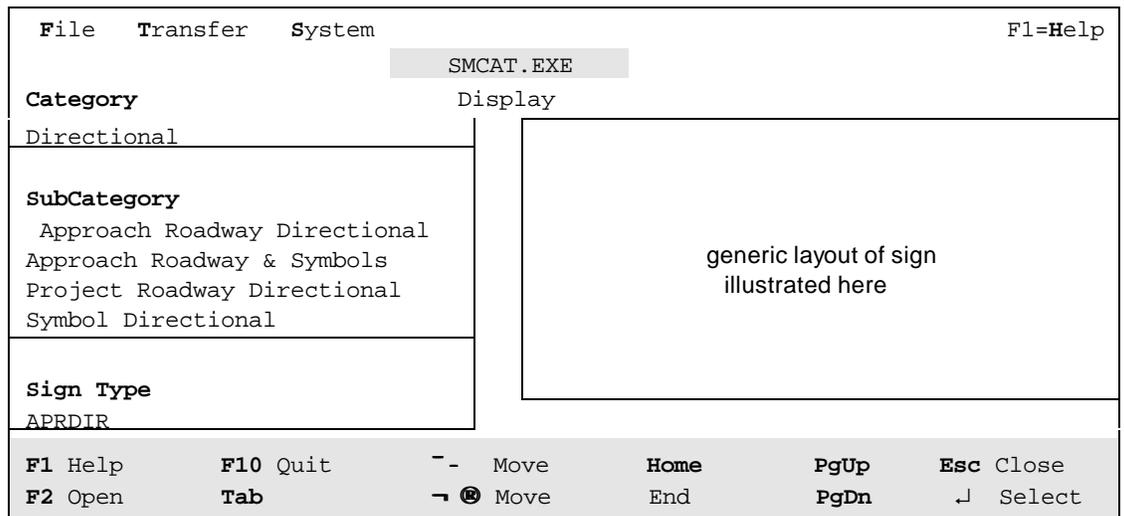
· Press “C” for Catalog

The program will now switch to the Catalog section of the program. On the left side of the screen, you will see pull-down menus and on the right, a display window with a generic layout of the sign corresponding to the highlighted menu. The cursor is located in the first Category menu, highlighting “Identification”. Follow the listing of signs on the map drawing on page to enter signs in the inventory. The first sign is a directional sign with symbols located on the highway.

**Select sign category menu**

· Press “D” to select “Directionals” and press <Enter> to choose this category

The selected category is highlighted and a second menu will appear, asking for a selection in a sub-category. The current sign type “Approach Roadway Directional” is highlighted and a layout is displayed.



· Select “Approach Roadway & Symbols” and press <Enter> to select this sign type  
A third menu appears asking for the number of symbols on the directional sign.

· Select “Three Symbols” and press <Enter>

The cursor will jump to the symbol display window to allow you to select three symbols. The first will be the boat ramp symbol. The current symbol category is “General, Accommodations and Services”.

· Press the <Right> cursor key to move to the correct category page (Water Recreation)

Notice that the yellow marker on the scroll bar on the bottom of the window moves with the pages and the menu on the left is updated.

### Select symbols

×Select the “RS-054 Boat Ramp” symbol (or press “B” as a shortcut) and press <Enter>

The symbol is added to the menu on the left and the next entry can be made. The second symbol is “Hiking Trail”.

Note: If you make a mistake, you can backtrack using the <Esc> key.

×Use the <Left> cursor key to move to the “Land Recreation” page

×Select “RS-068 Hiking Trail” and press <Enter>

The last symbol is “Canoeing”.

### Transferring to Specifications

×Move right to “Water Recreation”, select “RS-079 Canoeing” and press <Enter>

With all symbols entered, the program will transfer to the Specifications section and load the “APRS-O.SPC” specification file (see title bar on top of the screen). You are now in the edit mode. The cursor will move inside the window, ready to customize the specs. Specs that are highlighted can be changed; dimmed specs are locked and cannot be changed. Note that panel size and maximum line length are not yet displayed because no legend has been specified. These items will be updated once a legend has been entered.

Since this is the first time you are using the Specifications section, you should customize the default setting for manufacturer name and requisition number, if known.

×Press the <Esc> key to exit the “Edit” mode

The cursor will return to the menu bar.

×Select “Default” in the “File” menu and press <Enter>

A dialog box will appear with fields for manufacturer name and requisition number.

### Enter default specifications

×Enter a manufacturer’s name (usually UNICOR). No requisition number is necessary right now. Press <Enter> to activate the “OK” button command when done

Now that you have customized the default, resume editing your sign.

### Edit APRS-03

×Select “Edit” in the “File” menu and press <Enter> (the hot key is <F3>)

The cursor will jump to the next item that can be edited in this sign record. Notice that in the key bar at the bottom of the screen, “F5” is active as “Default”. This will insert the default information into this sign.

**Insert default**

×Press <F5> to activate the default setting

The items are updated in the window. Similarly, to clear these items you can press <F6>.

**Viewing distance**

· To check the viewing distance, move the cursor to “VW Dist.:" under “Installation” and press <Enter>

The viewing distance diagrams specify the size of the legend typography appropriate for the distance at which a sign is to be viewed. These diagrams can be found under “Help” or <F1>. To determine the legend size for signs where reaction time is not a critical factor, use the pedestrian viewing table. The vehicle viewing table is used for signs read from approaching automobiles and incorporates reaction time and advanced sign placement locations. Since viewing distance is directly related to letter size, enter the appropriate viewing distance for this particular sign and its location.

· Type “175” and press <Enter>

· To confirm the legend size, move the cursor to “Size (A/M):” under “Legend/Symbol” and press <Enter>

**Preferred letter size**

The matrix window will appear with a table for all available letter sizes. The viewing distance deemed appropriate is shown with corresponding letter size and margin size on one line. As you can see at the bottom of the matrix, the preferred letter size would be 6.25 inches. Since available letter sizes are rounded off to the inch, select the closest letter size.

Matrix						
-A/M-	-Spec-	-Panel Size-	-HAGL-	-Mounting-	- Post-	-Qty-
4"	HDO-04	0.000"x 0.000"	60"	Ground	4" x 6"	1
4"	ALU-04	0.000"x 0.000"	60"	Ground	4" x 6"	1
6"	HDO-04	0.000"x 0.000"	60"	Ground	4" x 6"	1
6"	ALU-04	0.000"x 0.000"	60"	Ground	4" x 6"	1
9"	HDO-04	0.000"x 0.000"	66"	Ground	4" x 6"	1
9"	ALU-04	0.000"x 0.000"	66"	Ground	4" x 6"	1

Viewing Distance: 175' Preferred (A): 6.2500" Preferred (M): 3.1250"  
 Selected : 112' Selected (A): 4.0000" Selected (M): 4.0000"

NEXT

OK

CANCEL

**Choose substrate**

Substrates are the materials a sign can be made of. Most signs are made in either high density plywood (HDO) or aluminum (ALU). A substrate is determines by the spec code.

· Move the cursor to the 6" letter size for HDO using the <Down> arrow

The corresponding viewing distance now indicates 168'. This viewing distance comes closest to the preferred 175'.

· Press <Enter> to select this set of specifications

The new set of specifications is inserted. Now enter the sign legend.

## Enter a legend

×Move the cursor to “Message” using the <Up> or <Dn> key (“M” is the hot key)

×When the message box is highlighted, press <Enter>

The message box will appear. Since you have already identified the symbols, all you need to do is enter the legend. Since you need a message with arrow left, you do not need to change the arrow direction on the first line, but continue with the actual message.

*Note: If desired, the symbols can be edited individually*

· Press the <Dn> key to move to the second line; the first line is locked.

The cursor will blink on the second line.

## Move to next line

· Type “North Creek” but do not press <Enter>

The <Enter> key would activate the “OK” button command. To move the cursor to the second line, use the following method.

· Press <Dn> and <Home>

The cursor now blinks on the third line.

· Type “Recreation Area”

Calculated line lengths for the first and second line are respectively 52.200 and 68.430 inches for a capital letter height of six (6) inches. These are shown on the right side of the matrix box.

· Press <Enter> to activate the “OK” button command

The legend is now updated and specifications have been calculated.

Maximum rounded off legend line length = 68.25"

Panel size = 104.25" x 50.25"

Post size = 6" x 8"

You have now customized the first sign record.

· Press <Esc> to exit the “Edit” mode

Since the file has not been saved, notice that the upper left corner indicates “VC-000”. This will be the individual number for this specific sign. We are now located in the “Visitor Center” folder, but this sign record has no number since it has not been saved.

## Saving a new sign

×Select “Save as...” in the “File” menu or press <F8>

The program automatically searches for the next number in line and will display this in the window. You can manually enter a number, or have the program search for an entry using the “Find Next Number” and “Find Available Number” button commands.

· Press <Enter> to select the “001” entry

The file will be saved and folders updated. The upper left corner now indicates sign ID number “VC-001”.

You are now ready to enter another sign. Since a similar sign is located on the opposite side of the intersection, you can modify the current sign. This will not affect the file just saved in the inventory.

### **Editing an existing sign**

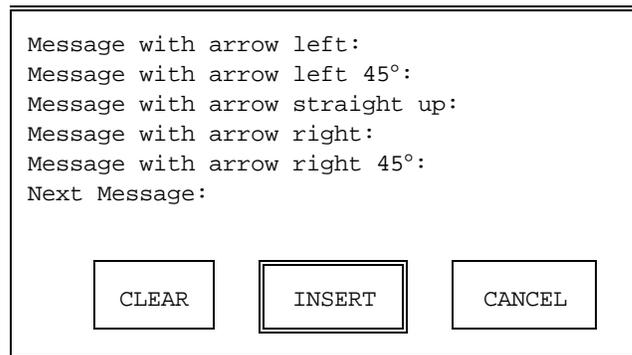
· Press <F3> to edit the sign

· Select “Message” and press <Enter>

Since only the arrow direction is different, this is all you need to change on the first line of the message.

· With the cursor on the first line, press the plus (+) and shift keys at the same time.

A selection box appears that will allow you to change arrow direction.



Message with arrow left:  
Message with arrow left 45°:  
Message with arrow straight up:  
Message with arrow right:  
Message with arrow right 45°:  
Next Message:

CLEAR      INSERT      CANCEL

· Select “Message with arrow right:” and press <Enter>

The message box has been updated with the new arrow direction.

· Press <Enter> to activate the “OK” button command

Since this is all you needed to change, you can now exit the “Edit” mode.

· Press <Esc> to exit the “Edit” mode

Do not “Save” the sign since this will overwrite the existing “VC-001 ” sign file. Use the “Save as...” command instead.

· Press <F8> to “Save As...”

The next number “002” is shown.

· Press <Enter> to select the entry

The window is updated with “VC-002”. Now enter the next sign on the map.

### **Transferring to the Catalog**

· Select “Catalog” in the “Transfer” menu

The program will switch back to the Catalog. The next sign to enter is a standard identification sign.

### **Select main identification**

· Select “Identification” and press <Enter>

A second menu appears for identification signs.

· Select “Standard Identification” and press <Enter>

The program will transfer to the Specifications section and load the "STANID.SPC" specification file. The cursor will move inside the window, ready to customize the specs.

· Press <F5> to insert the default information

**Check viewing distance**  
**Enter legend**

The viewing distance is currently 100'. This is what you want so go on to enter the legend.

· Select "Message"

· When the "Message" is highlighted press <Enter>

The message box will appear. The first and fourth line are locked (dimmed); they identify the message.

· Use the <Dn> cursor key to move the cursor to the second line

The cursor will blink on the first character of the second line.

· Type "North Creek" on the second line

You will now see a calculated line length of 17.760 inches. If you make a mistake, you can use the <Insert> key to toggle between "Insert" and "Overstrike" mode.

· Use the <Dn> and <Home> cursor keys to move the cursor to the fifth line

The cursor will blink on the first character of the fifth line.

· Type "Visitor Center" on the fifth line

Calculated line length is 10.175 inch for a two (2) inch high capital letter.

· Press the <Enter> key

The message window has been updated, as well as the legend window.

Maximum rounded off legend length = 17.75 inch

Grid = 1-1

Panel size = 32" x 9"

**Capital letter height**

· Move the cursor to legend "Size (A/M):" under "Legend/Symbol" to change the capital letter height

· Press <Enter> to edit the specifications and the matrix window will appear  
Currently indicated is the 2" letter height for a wall-mounted sign.

Look at the viewing distance information and the selected viewing information. The preferred A size is now 3.57".

· Press the <PgDn> key to display the next page

· Choose the 4", HDO-01, ground-mounted sign, by using the <Up> and <Dn> keys Indicated panel size for 4" is 64" x 18".

· Press <Enter> to select these specifications

Again, all specifications are updated. The file is now edited for your specific needs and can be saved using <F8>. You can now create another sign.

· Press <Esc> to exit out of edit mode to the menu bar

### Save as

· Select "Save As..." in the "File" menu

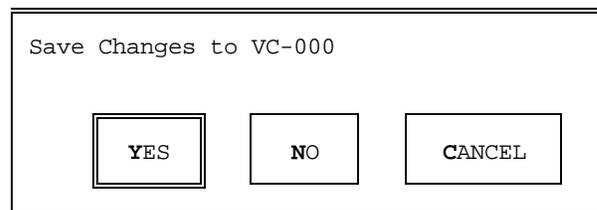
The program will search for the next number "003" and display it in a dialog box.

· Press <Enter> to save the sign

### Transfer to Catalog

· To enter a new sign, select "Catalog" in the "Transfer" menu

*Note: If you forget to save a sign you just edited, the program will automatically ask you if you would like to save it before discarding it.*



At the entrance of the visitor center, an hours sign is located.

· Select "Recreation" and press <Enter>

### HRS-02 sign

×Select "Opening Hours" and press <Enter>

Sign "Format A" is highlighted in the menu and the scroll bar at the bottom of the display window is activated.

· Use the <Right> key to move to "Visitor Center, HRS-02" and press <Enter>  
A menu appears at the left asking for the number of inserts you need.

· Select "Two inserts" and press <Enter>

The cursor will jump to the display window.

· Select “HRS-14” and press <Enter>

The menu is updated.

· Select “HRS-15” and press <Enter>

The specification file “HRS-A.SPC” will be loaded (see title bar on top of the window).

· Press <F5> to insert the default information

### Check viewing distance

· Change the viewing distance from 25' to 50' and press <Enter>

· Next, move the cursor to “Size (A/M):” and press <Enter>

Look at the viewing distance information and the selected viewing information. The preferred A size is now 1.78”.

· Select a 2” capital /letter height with a substrate of HDO and press <Enter>

A 2” capital letter height provides enough viewing distance to meet the criteria of 50’.

· Select “Message” and press <Enter>

· Move the cursor and change the hours to “8:00 am” and “4:00 pm”, and press <Enter>

### Remarks box

· You can remove comments in the “Remarks” section by selecting “Remarks” and pressing <Enter>

The entire message area is now highlighted (selected).

· To remove this message, simply press <Del>

The remark is erased.

You can also add remarks as necessary to make notes about a sign, location, etc.

· Press <Enter> to exit the “Remarks” section and <Esc> to exit edit mode

· Save the sign as “VC-004”

At the intersection near the boat ramp, you need an approach roadway sign similar to sign VC-001. To save time, let’s modified this existing sign to create the new one.

### Access an existing data file

· Select “Go to...” in the “System” menu

A dialog box will appear. This allows you to load the inventory file for VC-001.

Sign ID Number:

· Type "1" and press <Enter>

The file "VC-001" will be loaded. Since the new sign is located on a slower speed road, reduce the viewing distance to 100 feet.

**Check viewing distance** · Change the viewing distance from 175' to 100' and press <Enter>

· Next, move the cursor to "Size (A/M):" and press <Enter>

Look at the viewing distance information and the selected viewing information. The preferred A size is now 3.57".

· Select a 4" capital letter height with a substrate of HDO and press <Enter>

A 4" capital letter height provides enough viewing distance to meet the criteria of 100'.

· Press <Esc> to exit edit mode

**Save as** · Press <F8> to save the sign as "VC-005" and press <Enter>

You have now entered all signs related to the visitor center.

· Select "Inventory" in the "Transfer" menu, press <Enter> and <Esc>

You are now back at the same level where you left off: the "Visitor Center" at Level 4. There are currently five files in the Visitor Center folder. To review the signs just created, you can inspect each individual sign specification record.

· Select "Open" the "File" menu or press <F2>

The cursor will move inside the window.

· Select "VC-001" and press <Enter>

Sign specifications for "VC-001" will be shown.

To "browse" through an area's folder, you can use the <PgUp> and <PgDn> keys.

· Press the <PgUp> and <PgDn> keys to review the contents of the Visitor Center folder

· When finished, press <Esc> to return to Level 4

Since "VC-005" is located closer to the "Boat Ramp" than the "Visitor Center," you will move this sign to the "Boat Ramp" folder.

**Copy a file** · Select "Copy" from the "File" menu

The cursor will move inside the window.

· Select "VC-005" and press <Enter>

The file is now copied and pasted in the buffer.

· Press <Esc> to return to Level 3

· Select “Open” from the “File” menu or press <F2>

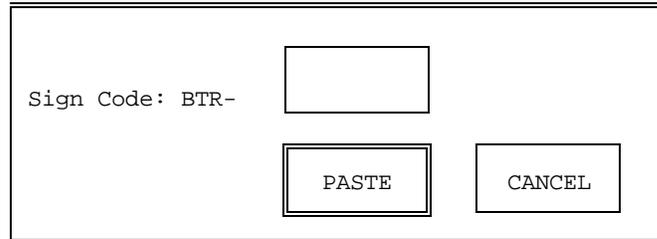
The cursor will move inside the window.

· Select “Boat Ramp” and press <Enter>

### Paste a file

· Select “Paste” from the “File” menu

A dialog box will appear asking for an ID number.



Sign Code: BTR-

· Type “1” and press <Enter>

The file “VC-005” will be copied and given the new ID code “BTR-001”.

**After** pasting the file, delete the original file in the “Visitor Center” folder.

· Press <Esc> to return to Level 3

· Select “Open” from the “File” menu

The cursor will move inside the window.

· Select “Visitor Center” and press <Enter>

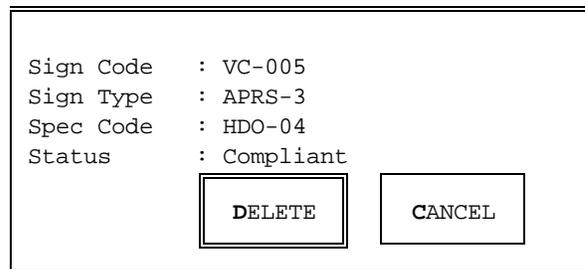
### Deleting a file

· Select “Delete” from the “File” menu

The cursor will move inside the window.

· Select “VC-005” and press <Enter>

A message box will appear asking for a confirmation on the command.



Sign Code : VC-005  
Sign Type : APRS-3  
Spec Code : HDO-04  
Status : Compliant

· Press <Enter> to activate the “Delete” command

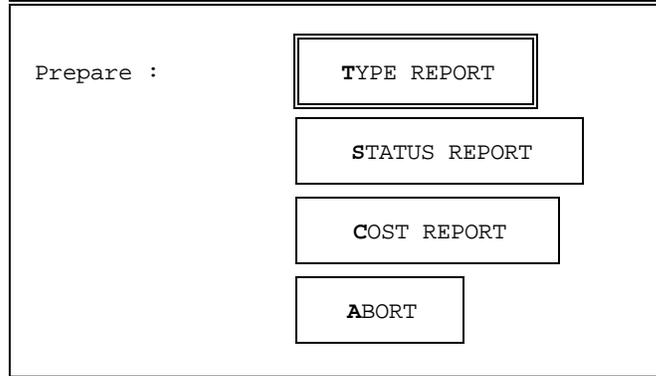
The file “VC-005” will be permanently deleted from the Visitor Center inventory.

· Press <Esc> to return to Level 3

### Summarize a folder

To review the sign types in a particular folder, you can issue a “Report” command.

· Press <F5> and a dialog box will appear.



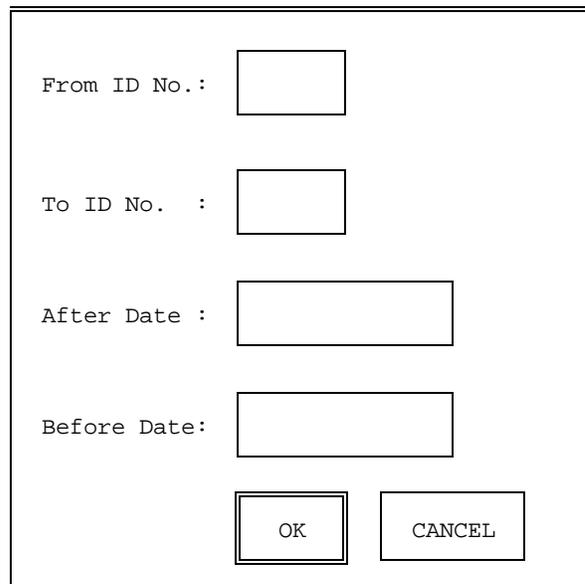
Prepare :

- TYPE REPORT
- STATUS REPORT
- COST REPORT
- ABORT

· Select “Status Report” by using the <Tab> key and press <Enter> (“S” is the hot key)

· Select “Visitor Center” and press <Enter>

The cursor will move inside the dialog box. Here you can request a report for specific signs between particular ID numbers, between certain dates or request all signs be in the report.



From ID No. :

To ID No. :

After Date :

Before Date:

· To select all the signs within the Visitor Center inventory, press <Enter>

A message box will appear showing a summary of all sign types available and all sign types resident in the folder with their respective quantities.

Visitor Center		
Range	:	All
Period	:	All
Signs Found	:	4
Compliant	:	4
Non-Compliant	:	
On Order	:	
Proposed	:	
In Stock	:	
Total Signs	:	4

PRINT	SAVE	CONTINUE
-------	------	----------

· After review of the window, press <Enter> to return to the menu/bar

*Note: you can print the summary tile with the "Print" button command*

### Access a specification file

In the "Boat Ramp" inventory is one symbol identification sign for the boat ramp. You could access the sign through the Catalog, but a faster way is to directly access the specification file.

· Select "Open" from the "File" menu

The cursor will move inside the window.

· Select "Boat Ramp" and press <Enter>

### Transfer to Specifications

· Select "New" in the "File menu

A dialog box will appear.

· Select "Specifications" and press <Enter>

A selection box appears asking for a specification file code.

Spec File:	<table border="1"> <tr><td>AC-000</td></tr> <tr><td>APRDIR</td></tr> <tr><td>APRS-0</td></tr> <tr><td>BLM-A</td></tr> <tr><td>BLM-B</td></tr> <tr><td>BLM-C</td></tr> </table>	AC-000	APRDIR	APRS-0	BLM-A	BLM-B	BLM-C
AC-000							
APRDIR							
APRS-0							
BLM-A							
BLM-B							
BLM-C							
	<table border="1"> <tr> <td>OK</td> <td>CANCEL</td> </tr> </table>	OK	CANCEL				
OK	CANCEL						

· Press “D” to jump to “DNG-00”, move to “DRSS-1” and press <Enter>  
The file “DRSS-1.SPC” (Directional sign with one symbol) will load.

· Change the viewing distance to 50 feet

· Then select “Size (A/M):” and press <Enter>

The preferred margin (M) is indicated as 0.8929" for 50' viewing distance.

· Select 1" margin (M) as the closest value and press <Enter>

We refer to margin height (M) for this directional sign since there is no legend size (A) to compare the viewing distance to.

Select “Message” and press <Enter>

Message:

Symbol:  
RS-000 Symbol Description  
Helvetica Bold Arrow, Direction

NEXT OK CANCEL

· Move cursor to the second line, type “RS-054 Boat Ramp” and delete the rest of the line.

· Move the cursor to the fourth line and type “Right”

· Press <Enter> to activate the “OK” button command

· Press <Esc> to exit edit mode.

· Save the sign as “002”

All your existing signs have now been entered.

· Select “Inventory” in the “Transfer” menu, press <Enter> and <Esc>

You should be at Level 4.

## Preparing an order

### Replacing a sign

Creating an order can be done many different ways. The two most common will be discussed here.

First, there is the replacement order where an old sign needs to be changed or replaced. Let’s assume that the signs created in the “Boat Ramp” have been out in the field for eight years and need to be replaced. First, create a duplicate sign record of the old sign.

· Select “Copy” from the “File” menu

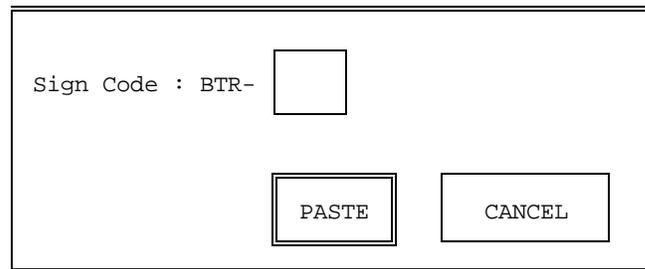
· Choose the “BTR-001” sign (APRS-3) and press <Enter>  
The file is now pasted in the buffer.

### Use of the asterix “\*”

· Select “Paste” from the “File” menu

A dialog box will appear asking for a new ID number. Because this sign will eventually replace “BTR-001,” it is given the same number, **but** an asterix (\*) is added to the end.

*Note: the asterix (\*) is the only non-numeric, non-alphabetic character the program will accept as an additional notation. Use this notation to identify replacement signs. The new and old signs are listed in the Inventory next to each other and are easily identified.*



The image shows a dialog box with a title bar. Inside the box, the text "Sign Code : BTR-" is followed by a small square input field. Below the input field are two buttons: "PASTE" and "CANCEL". The "PASTE" button has a double border, while the "CANCEL" button has a single border.

· Type “1” and an asterix (\*) and press <Enter>  
A duplicate file will be created with ID number “BTR-001\*”

### A new sign for the order

Another way of ordering is to create a new sign. Since you are still in the “Boat Ramp” folder, add a boat ramp rules sign (BTR-01).

· Open the “Transfer” menu and pres “o” to go to the “Orders’ section

· Highlight “Recreation” and press <Enter>

· Press “b” for “Boat Ramp” and press <Enter>

· Select “BTR-01” and press <Enter>

The file “BTR-01.SPC” will load.

· Press <F3> edit the sign specifications

The cursor will move inside the window.

### Enter the default

· Press <F5>

The default setting will be inserted.

### Check viewing distance

We have determined our viewing distance is 25' so there is no change to make.

· Next, move the cursor to “Size (A/M):” and press <Enter>

Look at the viewing distance information and the selected viewing information. The preferred A size is now .8929”. However, the smallest capital letter height allowed for this sign is 1.5” so this is what we will use.

· Press <Enter>

· Select "Message:" and press <Enter>

Message:	<b>No Wake Zone</b>	15.787
	<b>Idle Speed Only</b>	17.242
Next message:	<b>00 Horsepower</b>	16.860
	<b>Maximum</b>	10.448
Next message:	<b>No Swimming</b>	15.023
	<b>or Wading</b>	10.942
	<input type="button" value="NEXT"/>	<input type="button" value="OK"/>
	<input type="button" value="CANCEL"/>	

· Change "00 Horsepower" in the message window to "10 Horsepower" and press <Enter>  
The panel size will be updated to 25.375"x 29.25".

Note: The BTR-01 panel size will only be calculated AFTER a message has been modified.

· Press <Esc> to exit the "Edit" mode

· Save the sign as "BTR-003"

You have now completed your sign record entries for the new sign order.

### Creating the order form

· To create an order, transfer to the Orders section of the program by opening the "Transfer" menu and selecting the "Orders" command

Here is the screen you see for the first time.

File	Data	Transfer	Utilities	System	F1=Help
		-	C:\SM\ORDERS\DISTRICT.ORD		
Order Number	Qty	Status	Cost (\$)	Manufacturer	
<b>F1</b> Help	<b>F3</b> Edit	<b>F5</b> Report	<b>F7</b> Export	<b>F9</b> Pause	<b>Esc</b>
<b>F2</b> Open	<b>F4</b> Print	<b>F6</b>	<b>F8</b>	<b>F10</b> Quit	↵ Select

If this is the first time you are using the Orders section, you will want to create a default order. When this order is present in your file, every time you generate a new order, the default order will automatically be used to insert your address, name, phone number, etc.

**Default order**

· Create a new order by choosing the “New” command in the File menu  
A dialog box will appear.

Order:	<input type="text"/>
Filename:	<input type="text"/>
<input type="button" value="NEW"/> <input type="button" value="CANCEL"/>	

· Type “Default Order” for order number, “DEFAULT” for file name and press <Enter>

· Note: For the default to work properly, this file name **must be capitalized** or the information will not be transferred to any new order you create.

The default order is created and displayed. The status of the order is “Proposed” and there are no signs listed in the file (quantity =0).

· Open the order to display the cover page

File Data Transfer Utilities System		F1 = Help
C:\SM\ORDERS\DISTRICT.ORD		
- Cover Page		
ship to :	Status	: Proposed
	Manufacturer	:
	Installed by	:
Prepared	Remarks	
By :		
Date :		
Phone :		
Approved		
By :		
Date :		
Phone :		
Ordered	Cost	
By :	Sign Price	: \$0.00 (0 signs)
Date :	Installation	: \$0.00
Phone :	Shipping	: \$0.00
	Total Cost	: \$0.00
F1 Help	F3 Edit	F5 Report
F2 Open	F4 Print	F6
F7 Export	F8	F9 Pause
Esc Close	F10 Quit	i Select

- Edit the file by using the “Edit” command in the file menu
- Enter your address, appropriate names and telephone numbers
- When finished, press <Esc> twice to return to the first Orders screen

**New order**

- Create a new order by choosing the “New” command in the file menu  
The dialog box will appear.

- Type “12345” for order number and the same for the file name (file name is limited to alpha numeric characters, no spaces allowed) and press <Enter>  
A new order is created and displayed.

**Orders cover page**

- Open this order to display the cover page  
The status of the order is “Proposed.” All items edited in the “Default Order” have been inserted in the new file.

- Proceed to open the sign list by using the “Open Sign List” command  
The sign list will be displayed without signs.

**Adding signs to the order**

- To add signs to the sign list, select “New” from the “File” menu  
A dialog box will appear asking you to specify the files you would like to search for.

Location :	<input type="text"/>	
ID No. :	<input type="text"/>	
Sign Type :	<input type="text"/>	
Spec Code :	<input type="text"/>	
Req. No :	<input type="text"/>	SEARCH
Status :	<input type="text"/>	CANCEL

- Press the <Tab> key until the cursor is in the “Location” field and type “BTR”

· Press the

<Enter> key

The file will now search for signs found in “Boat Ramp.” Once a match is found, it will display the file and ask if you want to add it to the order or if you would like to search for the next file.

· Type “A” for “Add”

A dialog box will appear asking for the quantity of this sign you would like to order.

**Quantity of added signs**

· Type “1” and press <Enter>

Continue until you have all the signs you would like, or until the window “No match found” appears. This indicates that all files have been searched. All files added are now displayed.

· To view the contents of a particular file, you may select “Open” from the “File” menu

**Automatic status change**

*Note: Signs added to the sign order list automatically receive the requisition number of the order and status of the order (“Proposed” or “On Order”).*

· When finished viewing, return to the order cover page by pressing <Esc>

You will notice that the quantity of files in the “Cost” box has been updated.

· Select “Edit” from the “File” menu

The cursor will move inside the window.

· Choose the “Status” field and press <Enter>

The dialog box will display three items.

The image shows a rectangular dialog box with a double-line border. On the left side, the text "Status:" is followed by a vertical list of three options: "Proposed", "On Order", and "Received". To the right of this list are two buttons, one above the other. The top button is labeled "EDIT" and the bottom button is labeled "CANCEL".

· Select “On Order” and press <Enter>

A progression box will appear and all files in the order sign list will now receive the “On Order” status. After the program edits the sign list, a dialog box will appear indicating the enclosed files (number of files in the sign list), files edited (number of files in the sign list found and modified), and files not found (number of files in the sign list which could not be found).

Enclosed files	:	4
Files edited	:	4
Files not found/edited	:	0

· Press <Enter> to continue

· Press <Esc> to return to the menu bar

· Select "Insert Prices" from the "Utilities" menu  
A dialog box will appear.

From ID No.:	<input type="text"/>
To ID No. :	<input type="text"/>
After Date :	<input type="text"/>
Before Date:	<input type="text"/>
<input type="button" value="OK"/> <input type="button" value="CANCEL"/>	

· Press <Enter>

All signs will have prices inserted if that sign type is in the internal price list

Another box will appear and tell you how many signs had prices inserted, how many prices were not found, etc.

*Note: Since all these signs were custom signs, no prices were inserted.*

· Press <Enter> to continue

· Select "Print" from the "File" menu

A dialog box will appear asking if you would like to update the sign list?

**Always answer “No.”**

Another box will appear that allows you to determine whether you want to print a brief summary or a detailed order and how many copies.

Move the cursor to Order with the <Down> key

· Press <Enter> to activate the “Print” button command

A progression box will appear and all files in the order sign list will now be processed.

The cover page and summary will print *after* the sign list has been printed.

**Process the order**

· Follow the procedures your district sign program manager has for processing your sign order.

· Return to the first level of the Order section by pressing <Esc>

**Locking files**

To prevent modification of sign orders that have been processed, and to prevent deletion and/or modification of sign records referenced in the sign order list, secure the sign order by locking it. (Since locking files is a personal preference, it is your choice whether you do this in real life. Do it here for practice.)

· Select “Secure” in the “File” menu

· Choose the file “12345” you have just processed

· Press “A” to lock “ALL FILES” in your order

The order and all signs referenced in the sign order list will now be locked.

**Unlocking files**

Once an order has been processed and is shipped, you can unlock the file(s), but it is not necessary.

· Select “Secure” in the “File” menu

· Choose the file “12345” you have just processed

· Now unlock “ALL FILES” in the order

All the signs in the order will now be unlocked.

**Received order**

Once you receive the order, you will want to change the status of these signs. You could do it sign by sign, but there is an easier way.

· Select “Open” in the “File” menu

· Choose the file “12345”

· Select “Edit” from the “File” menu

The cursor will move inside the window.

· Choose the “Status” field and press <Enter>  
The dialog box will display three items.

· Select “Received” and press <Enter>  
Since all the signs in this order have arrived, change the status of each to Compliant by pressing <Enter>

After editing the status of all signs, you will return to the menu bar.

· Press <Esc> twice to exit the edit mode and return to the first level in Orders  
This completes the ordering of signs in the inventory.

## **Backing up**

To backup your inventory of signs, return to the Inventory.

· Select “Inventory” in the “Transfer” menu

· Press <Esc> until you are back at Level 2 of the Inventory

· Insert a formatted blank disk in disk drive A:

**Do not** remove you floppy disk before pasting the file(s).

## **Copy the sign inventory to be backed up**

· Select “Copy” in the “File” menu, highlight “North Creek” and press <Enter>  
The sign inventory for North Creek is now pasted in the buffer.

· Go to “System” menu and select “Database” to access a new location for the backup

## **Change the database**

· Type “A:” and press <Enter>  
A dialog box will appear asking for a new district name.

· Type “Backup” and press <Enter>  
A new district file will be created on the floppy in drive A:

· Select “Open” in the “File” menu  
The district file will be opened.

## **Paste a copy of the backup file**

· Select “Paste” in the “File” menu  
A dialog box will appear asking for a new Project name.

· Type “North Creek Backup” for project name and “NCBACKUP” for file name  
A duplicate of North Creek sign inventory will be created.

*Note: To prevent erasure of an existing backup inventory, the “Paste” command will not allow you to overwrite an existing inventory. Therefore, if you are backing up on the same floppy for a second time, you have two options. First, if you would like to use the same name for your backup, erase the existing backup inventory file on the floppy prior to copying and pasting your new backup. Secondly, if you want to save your existing backup,*

*simply name new one differently. You can keep track of your backups by numbering them consecutively (Backup 1, Backup 2, etc.)*

**Return to database** · Select “Database” in the “System” menu to return to the original inventory location  
Your original startup path “C:\SM\PROJECTS\” will be highlighted.

*Note: It is very important to return to the original inventory location prior to quitting Sign Manager. There will be a **big problem** if you were to quit while located at another location (A: for example). If you select “YES” when asked if you want to return to the current file position when quitting, the next time the program starts, it will search for the inventory on drive A:. It’s not there and you will panic. Where are my signs?! Don’t worry. Select “Database” in the “System” menu and type in “C:\SM\PROJECTS\” to return to the proper inventory location.*

· Press <Enter> to select the original inventory location path  
You are back in the original inventory location.

**Quit** This completes the tutorial session. The North Creek inventory and order files may be deleted using the “Delete” command in the “File” menu. To quit the program you may:

· Press <F10>  
A dialog box will appear asking if you would like to save your current position.

· Select “YES” if you would like to return to this position the next time you start up, or “NO” if you would like to start at Level 1.

**Using “Master” files** When you are creating your inventory of existing signs or when you are entering signs for a new location or project, you may use a time saving technique of creating your own master files for a boat ramp, picnic area, etc. Since there will be some signs that are common to all boat ramp locations, create a “Master Boat Ramp” file that includes all these signs. You modify the signs for your own use and store them on a floppy disk (or in another folder on the hard drive) the same way you backup your files. You can create many “masters” that can be used whenever you enter new data. To retrieve your “master”, use the same technique as backing up.

Make sure you are located in your sign inventory.

· Select “Database” in the “System” menu to access a new database location

· Insert your “Master” disk which contains the “Master” files you created in disk drive A:

· Type “A:” and press <Enter>  
Your “Master” files will be opened.

· Choose the file you want to copy and select “Copy” in the “File” menu

The file will be copied.

· *Select “Database” in the “System” menu to return to the original database location*  
Your original startup path “C:\SM\PROJECTS\” will be highlighted.

**Do not** remove you floppy disk before pasting the file(s).

· *Press <Enter> to select the original inventory location path*  
You are back in the original inventory location.

· *Move to the folder where you want to create a new file and select “Paste” in the “File” menu*

A dialog box will appear asking for a new name.

· *Type the appropriate name(s) and press <Enter>*

A duplicate of your “Master” will be created. This file can now be edited to suit the needs for that particular location.

After “Pasting” the “Master” files you may remove the floppy.

# **Chapter Three**

## **Inventory**

## Screen display

There are five levels of information in the Inventory, each level providing more detailed information than the last. At startup, the Inventory will open up at the level last specified or, if nothing is specified, level one. (Registering the last location and level is done automatically when transferring to another program section, or when quitting in the Inventory.) Levels used are:

- level one: District listing
- level two: Project listing
- level three: Location listing
- level/ four: Sign record listing
- level/ five: Sign record specifications

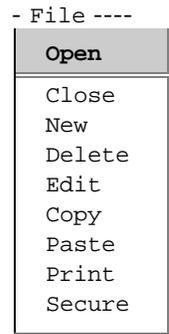
File	Data	View	Transfer	Utilities	System	F1=Help				
- C:\SM\PROJECTS\PROJECTS.INV										
Project				Fls	Total	C	N	O	P	S
North Creek			01-22-1998	4	42	25	0	14	0	3
Level 2				Fls	Total	C	N	O	P	S
District :	Pittsburgh District			1	471	157	124	7	150	33
Project :										
Location :										
<b>F1</b> Help	<b>F3</b> Edit	<b>F5</b> Summarize	<b>F7</b> Next	<b>F9</b> Pause	<b>Esc</b> Close					
<b>F2</b> Open	<b>F4</b> Print	<b>F6</b> Find	<b>F8</b> Previous	<b>F10</b> Quit	↓ Select					

Sample screen appearance in Level 2 of Inventory.

Thus a hierarchy of files is established which gives a clear overview of the sign database. To access sign record specifications at level five, you will need to open the folders in which the file is located. First, open the appropriate project folder, then the location folder, and finally the sign. A short cut to a particular sign in the data base is the "Find" command to search for a single file or files with similar criteria.

The current level of information is displayed in a summary window at the bottom of the screen. It indicates the current level, opened files/folders and records located in the file, and their particular status.

## File menu



### Open command <F2>

Opens the selected file/folder and displays its contents in a window. If only one (1) file is present, the file is automatically selected, otherwise the cursor will move inside the window to select a file. After selection of a file, the level will be updated and the file/folder will be listed in the summary window.

*Active* levels one to four

*Note* If it seems that a file is missing in the window, make sure that you have selected “All” Signs in the “View” menu. For example, if “Non-compliant” is selected, only files matching that criteria, or folders containing files matching this criteria will be listed in the window

**Close command <Esc>** Closes the current file and returns to the previous level.

*Active* levels two to five

### New command

Creates a new file/folder as specified in the dialog window.

- At level one, the creation of a new file means creation of a new database, thus a dialog window will ask for a new path name (see “Database” command in the “System” menu for more information).
- At level two, it will create a new project folder, with a file name of a maximum eight (8) characters (no spaces).
- At level three, a location folder is created with a file name of maximum three (3) characters (no spaces).
- At levels four and five, a new sign is created and the program will switch to either the Catalog or Specifications section of the program.

*Active* All levels

*Note* At levels four and five, you can also create a new sign by transferring to the Catalog or Specifications section directly using the “Transfer” menu

**Delete command**

Deletes the selected folder(s)/file(s) from the database. If only one (1) file/folder is present, it is automatically selected, otherwise the cursor will move inside the window to select a file. Before actually discarding the file/folder, you will be given a brief description of the file and a choice of executing or reversing the command. Once a folder and enclosed files are deleted, they cannot be retrieved; use caution when using this command. At level one, deleting will erase all data in the Inventory.

*Active*            All levels

*Note*              If a file contains locked files/folders or is locked itself (dimmed on the screen), it cannot be deleted. To unlock a file/folder (and/or enclosed files), select the “Secure” command in the “File” menu.

**Edit command  
<F3>**

Modifies an existing file/folder as specified in the dialog window. If only one (1) file/folder is present, it is automatically selected, otherwise the cursor will move inside the window to choose a file. After modification, the file will be sorted and will be inserted in the correct location. At level five, the program will transfer to the Specifications section to allow editing of the sign specifications for that particular sign type.

*Active*            All levels

*Note*              If a file contains locked files/folders or is locked itself (dimmed on the screen), it cannot be edited. To unlock a file/folder (and enclosed files), select the “Secure” command in the “File” menu.

**Copy command**

Puts the selected file(s)/folder(s) in a buffer, ready to be used by the “Paste” command. “Copy” and “Paste” can only be used on identical levels; for example, a file copied on level three can only be pasted on level three. The buffer will be erased after a “Delete” command is executed.

*Active*            All levels

*Note*              Use this command to backup the entire database or parts of the database. Refer to the tutorial for procedures.

**Paste command**

Used in conjunction with copy. After a file/folder is copied in the buffer, it can be pasted anywhere, provided it is on the same level (you cannot paste a location, level three, in a district, level two).

*Active*            All levels

*Note*              Very useful when creating a new project or location. Use it to paste standard files (boat ramp file, picnic file, campground file, etc.) After pasting a file/folder, it can always be modified/edited to suit particular needs.

**Print command <F4>**

Prints the selected file(s)/folder(s) as specified in the dialog window. If only one file/folder is present, it is automatically selected, otherwise the cursor will move inside the window to select a file. The file/folder will print as it is displayed on screen. Print commands are:

- Print
  - *files*, prints all sign specification records in the file/folder.
  - *overview*, prints only a summary of enclosed files/folders and their individual status. At levels one to two only.
- File
  - *short*, prints a one line summary of the sign specification.
  - *long*, prints the entire specifications of the sign (two signs per page)
- Partition
  - *on*, prints only those files that meet the criteria as specified with the "View" command of that particular file/folder. (If non-compliant is selected, only non compliant signs will print.)
  - *off* prints all records in the file/folders.
- From
  - prints signs with ID number entered, and higher
- To
  - prints signs with ID number entered, and lower
- Copies
  - prints the specified number of printouts
- Active
  - All levels
- Note:
  - To choose print commands, move the cursor to the command with the <Tab> key and use the <Up> or <Down> key to select the command selection.

Print execution can be canceled by pressing the <Esc> key. Wait until the current file is finished printing, after which normal program execution can resume.

**Printout samples**

U.S. Army Corps of Engineers		District: District name						Sign Overview 01-27-1998 Page 1	
Name	Code	Files	Total	C	N	O	P	S	
Project One	PROJECT1	13	44	26	0	13	1	0	
Project Two	PROJECT2	24	248	354	57	45	11	0	
Project Three	PROJECT3	7	74	36	8	7	0	25	
Project Four	PROJECT4	34	405	366	284	142	0	34	
Total		58	997	564	348	207	12	59	

Sign overview

U.S. Army Corps of Engineers		District: District name				(A)	Sign Inventory	
Project: Project Name		Location: Location Name				(A)	01-27-1998 (A) Page 1	
ID.	Type	Spec	A/M	Panel Size	Qty	HAGL	Page	Installed
LOC-001	STAND	HDO-03 3"		24x 48	1	40"	7.2	05-15-97
LOC-002	SWM-03	HDO-01 .75"		22x 23	1	40"	6.5	05-15-97
LOC-003	BTR-02	ALU-03 2"		18x 24	2	60"	5.3	
LOC-004	APRS-3	ALU-05 3"		6x 12	1	40"	5.2	
LOC-005	CMP-08	HDO-05 3"		5x 12	1	40"	7.8	06-25-96
LOC-006	APRS-09	HDO-04 2"		12x 28	1	60"	3.2	
LOC-007	SIGCND	HDO-09 2.5"		23x 48	1	40"	7.2	05-15-97
LOC-008	TR-003	ALU-04 2"		24.25x 25	1	40"	7.8	06-25-96
LOC-009	R4-09	ALU-04 2"		12x 18	12	40"	7.8	
LOC-010	DNG-04	ALU-02 4"		18x 12	1	35"	6.5	05-15-97
LOC-011	SLAT-3	HDO-07 2"		12.75x 20	1	40"	7.11	
LOC-012	SWM-01	HDO-03 2"		48x 24	1	60"	6.3	05-15-97
LOC-013	RS-034	RHW-01 2.5"		8x 12	1	40"	6.5	05-15-97
LOC-014	PRK-AC	ALU-04 4"		6.25x 20	1	40"	8.4	
LOC-015	SIGCND	ALU-03 3"		6x 12	24	40"	7.2	05-15-97
LOC-016	APRS-3	HDO-05 3"		25x 48	1	35"	8.2	
LOC-017	BTR-02	ALU-09 2"		17x 28	1	40"	7.8	06-25-96
LOC-018	WRN-11	ALU-01 3"		12x 21	1	60"	7.8	06-25-96
LOC-019	FDI-1	HDO-09 4"		6x 18	1	60"	6.5	

Short sign record (one line)

U.S. Army Corps of Engineers		District: District name(A)		Sign Inventory	
Project: Project Name		Location: Location Name		(A) 01-27-1998 (A) Page 1	
LOC-002					
Sign Type	:BTR-02	Page	:5.3	Requisition	:12345
Spec Code	:HDO-03	By	:Debra Stokes	Manufacturer	:Unicor
Status	:Compliant	Date	:05-15-97	Installed	:08-25-97
Legend		Panel		Installation	
A/M	:.75"	Size	:22x 11.25"	Mounting	:Wall
Length	:22.753	Qty	:1	Post Size	:N/A
Grid	:3	HAGL	:60"	Post Qty	:N/A
Color	:White	Color	:Corps Brown	Vw Dist.	:50"
Message		Remarks			
Campsite Fees		Include	"Campground Full"	panel	
(4) optional legend					
May 4, September 30		Typeface	:Helvetica Bold		
Campsite \$8.00 pwe site		14 Day Limit			
LOC-002					
Sign Type	:BTR-02	Page	:5.3	Requisition	:12345
Spec Code	:HDO-03	By	:Debra Stokes	Manufacturer	:Unicor
Status	:Compliant	Date	:05-15-97	Installed	:08-25-97
Legend		Panel		Installation	
A/M	:.75"	Size	:22x 11.25"	Mounting	:Wall
Length	:22.753	Qty	:1	Post Size	:N/A
Grid	:3	HAGL	:60"	Post Qty	:N/A
Color	:White	Color	:Corps Brown	Vw Dist.	:50"
Message		Remarkd			
Campsite Fees		Include	"Campground Full"	panel	
(4) optional legend					
May 4, September 30					
Campsite \$8.00 pwe site		14 Day Limit			

Long sign record (two per page)

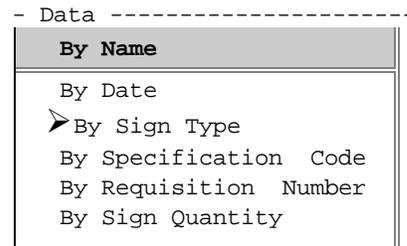
## Secure command

Locks or unlocks a selected file. If only one file/folder is present, it is automatically selected, otherwise the cursor will move inside the window to select a file. Used to prevent accidental erasure or modification. You may secure a single file or folder, or all files located within the folder. Secured files/folders or files located in a secured folder cannot be edited, deleted or added to. To reverse the command, select the “Secure” command again.

*Active* All levels

*Note* Locked files/folders cannot be modified while in this application, it does not prevent erasure of the file(s) once back in the DOS environment.

## Data menu



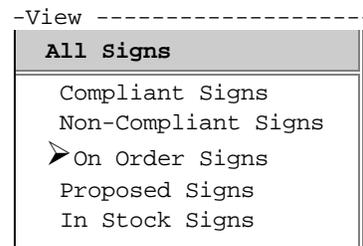
## All sorting commands

Controls the display of files/folders in the opened file/folder. Data can be sorted in ascending or descending order and by the criteria as listed in the menu. Display of a file is “remembered” as last specified and indicated in the menu with an arrow.

*Active* levels two to four

*Note* The “Date” command refers to the creation/modification date of the file/folder on levels two to three, and to the installation date on level four.

## View menu



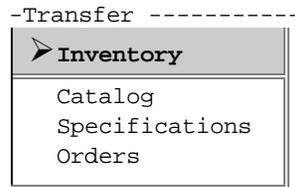
## All viewing commands

Controls which files are currently viewed in the window. Only those files that match the view criteria will be listed in the window. Display of a file is “remembered” as last specified and indicated in the menu with an arrow. The viewing status of an opened file can be quickly referenced in the summary window below. The data in the file matching the currently selected viewing criteria is highlighted, while those that do not are dimmed. For example, if the “Compliant” command is selected, files that are compliant or folders that contain compliant files are shown in the window; the data in the summary window under “C” will be highlighted.

*Active* levels two to four

*Note* If information seems to be missing in a file or folder, check the “View” menu. If a command other than “All” is selected, it may be that the missing file/folder does not meet the viewing criteria and is not listed in the window.

## Transfer menu



### Inventory command

Transfers control to the Inventory of the program. The files that have been modified last will be opened and displayed in a window.

*Active* All levels

*Note* If the command is dimmed, you are currently in the selected program.

### Catalog command

Transfers control to the Catalog of the program to select a sign type. When creating a new sign and transferring from Inventory to Catalog, make sure you have selected a location to save the new sign into, prior to transferring to the Catalog (transfer at level four or five). If not, you will not be able to save a sign in the Specifications section later on.

*Active* All levels

*Note* If the command is dimmed, you are currently in the selected program.

### Specifications command

Transfers control to the Specifications section of the program to select a specification file. When creating a new sign and transferring from Inventory to Specifications section, make sure you have selected a location to save the new sign into, prior to transferring to the Specifications section (transfer at level four or five). If not, you will not be able to save a sign. See the Specifications section of the program for more information on creating signs directly through the Specifications section.

*Active* All levels

*Note* If the command is dimmed, you are currently in the selected program. The easy way to enter a new sign is to first select a sign type in the Catalog, after which the correct specification file is accessed.

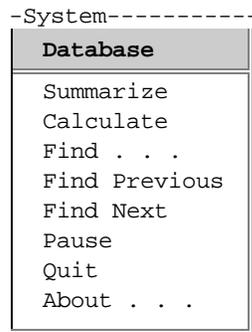
### Orders command

Transfers control to the Order section of the program to generate or modify an order.

*Active* All levels

*Note* If the command is dimmed, you are currently in the selected program.

## System menu



### Database command

Selects the active Inventory database path. To access another Inventory database, type the new path and the default will be changed. To import files from another database in your database, use the same technique as described with “Backing up files” in the tutorial (see page 23).

*Active*            All levels

*Note*              When changing a database path, the program will look for an existing file, if none is found, a new one will be created prompting for a new name. When changing the database path, the new path is not used as the default start up setting, unless the new setting is saved when quitting or transferring. The next time the program loads, this setting will be used as your start up.

### Summarize command <F5>

Summarizes the selected file/folder in sign types (approximately 51). The result is displayed in a window and can be printed after summarizing.

*Active*            levels one to three

*Note*              Summarize execution can be canceled by pressing the <Esc> key.

### Calculate command

Allows for a recalculation of the entire database after a system crash, disk error, internal error or power failure. Calculation of a database includes the quantity of enclosed files/folders, total number of signs in the files, and quantity of specific sign status.

*Active*            level one only

### Find command <F6>

Searches for files in the database matching the specified criteria. Criteria can be as general or as specific as you want. The program checks your entry with the file in the inventory for a match. This way you can specify a search for ID Number 1, which will result in display of signs 001, 012, 188, etc. Or you can search for a specific ID Number match: 001, which will display all signs with ID number 001. Search criteria are:

*Location file name*    maximum three letter abbreviated location file name (BTR, PIC, etc.)

*ID number*            sign ID code (1, 001, 10\*, \*, 012, etc.)

*Sign type* sign type as listed in the matrix (STANID, APRDIR, BTR-01, etc.)

*Sign specification* sign specification code (HDO-04, HDO, 06, ALU, etc.)

*After and Before* sign installation date; you may elect to see signs installed prior to a date 08 (select before), after a date (select after) or during a certain period of time (using both after and before).

*Active* All levels

**Find next/previous command**  
<F7>/<F8>

Finds the next/previous sign with the criteria as selected with the “Find” command <F6>.

*Active* All levels

*Note* To view all signs in an entire database, do not specify any criteria and perform a search. The first sign will appear. To view the next sign, press <F7> and the next available sign will appear. To view signs in a particular location (at level five), it is faster to use the <PgUp>, <PgDn> keys.

**Pause command**  
<F9>

Specifies the waiting time before the screen goes blank with the pause screen, displaying the program version, section, and time. To return to normal execution, press any key.

*Active* All levels

*Note* To deactivate screen save, enter “0” minutes.

Pressing <F9>, activates the pause screen, not the “Pause” command.

**Quit command**  
<F10>

Exits program to DOS. You may select a return to your current position when starting up again; in this case, select “YES” when asked “Save current file position”. If not, you will start up at level one.

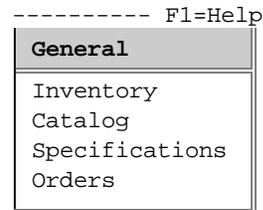
*Active* All levels

**About command**

Shows the startup screen with copyright notice.

*Active* All levels

**Help menu**



<b>General command</b> <F1 >	Transfers control temporarily to a General help program. The program contains information on sign types and their hierarchy, material specification codes, color codes, error codes, and diagrams for viewing distances and footings. While in the help program, you may switch to other available help files by using the <PgUp> and <PgDn> keys.
	<i>Active</i> All levels
<b>Inventory command</b>	Transfers control temporarily to the Inventory help program. The program contains information on commands and key words. While in the help program, you may switch to other available help files by using the <PgUp> and <PgDn> keys.
	<i>Active</i> All levels
<b>Catalog command</b>	Transfers control temporarily to the Catalog help program. The program contains information on commands and key words. While in the help program, you may switch to other available help files by using the <PgUp> and <PgDn> keys.
	<i>Active</i> All levels
<b>Specifications command</b>	Transfers control temporarily to the Specifications help program. The program contains information on commands and key words. While in the help program, you may switch to other available help files by using the <PgUp> and <PgDn> keys.
	<i>Active</i> All levels
<b>Order command</b>	Transfers control temporarily to the Order help program. The program contains information on commands and key words. While in the help program, you may switch to other available help files by using the <PgUp> and <PgDn> keys.
	<i>Active</i> All levels

# **Chapter Four**

## **Catalog**

## Screen display

There is only one level of information in the Catalog. Sign types are selected by scrolling through the menus at the left side of the screen. A generic sign layout of the selected sign is shown in the display window. To make a selection, move the cursor to the desired category and press <Enter>. The selected category will be highlighted and a sub-category will appear. Make your selections until the desired sign type is shown in the window. Once a sign type is selected, the program will transfer to the Specifications section and the sign can be modified and/or saved. To return to a previously selected menu, press the <Esc> key. The hierarchy of sign displays is identical to the chapters and sections in the Corps of Engineers sign manual.

*Note: screen display colors match sign colors as shown in the sign manual as close as possible. However, screen colors may vary depending on the different hardware configurations used. Warning signs (yellow sign panels with black legends) are shown on screen in reverse (black sign panels with yellow legends).*

## File menu



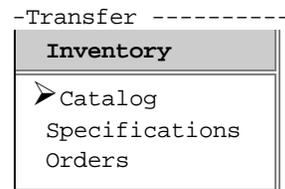
### Open command <F2>

Moves the cursor in the Category menu to select a sign type. Select the desired category and press <Enter>. Continue selecting until the correct sign type is displayed. Program execution will then automatically transfer to the Specifications section.

*Active*            At menubar

*Note:*            Press the <Esc> key to return to a previous level or the menubar. Additional files are available if the horizontal or vertical scrollbars are highlighted. If you cannot find a sign type, try using the <Left> and <Right> cursor keys to scroll pages from left to right, or use the General help file to consult the sign hierarchy.

## Transfer menu



### Inventory command

Transfers control to the Inventory of the program. The files that have been modified last will be opened and displayed in a window.

*Active*            At menubar

### Catalog command

Transfers control to the Catalog of the program to select a sign type. When creating a new sign and transferring from Inventory to Catalog, make sure you have selected a location to save the new sign into, prior to transferring to the Catalog (transfer at level four or five). If not, you will not be able to save a sign in the Specifications section later on.

*Active* In Inventory, Specifications or Orders.

**Specifications command**

Transfers control to the Specifications section of the program to select a specification file. When creating a new sign and transferring from Inventory to Specifications section, make sure you have selected a location to save the new sign into, prior to transferring to the Specifications section (transfer at level four or five). If not, you will not be able to save a sign. See the Specifications section of the program for more information on creating signs directly through the Specifications section.

*Active* At menubar

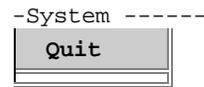
*Note:* The easy way to enter a new sign is to first select a sign type in the Catalog, after which the correct specification file is automatically accessed.

**Orders command**

Transfers control to the Order section of the program to generate or modify an order.

*Active* At menubar

**System menu**

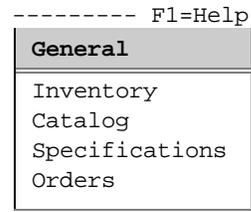


**Quit command**  
<F10>

Stops program execution and returns to DOS.

*Active* Always

**Help menu**



**General command**  
<F1 >

Transfers control temporarily to a General help program. The program contains information on sign types and their hierarchy, material specification codes, color codes, error codes, and diagrams for viewing distances and footings. While in the help program, you may switch to other available help files by using the <PgUp> and <PgDn> keys.

**All other commands**

Transfers control temporarily to the selected help program. The program contains information on commands and key words. While in the help program, you may switch to other available help files by using the <PgUp> and <PgDn> keys.

# **Chapter Five**

## **Specifications**

## Screen display

Shows sign specification file (and database file, if editing an existing file). When an existing sign file is accessed for editing, the specification file for that particular sign type is loaded and compared to the existing file. The specification file determines what and how the database file can be modified. Without a specification file, a sign record cannot be generated or modified. Files in the Specifications section will show those items that cannot be edited in grey, and those that can be changed in white.

When a new sign type is selected in the Catalog, the correct sign specification file is accessed in the Specifications section. Depending on the type of sign, this specification file may be very specific (BTR-01.SPC for a BTR-01 sign type) or general (RS-000.SPC for a recreation sign type RS-001 to RS-999)

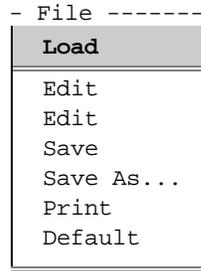
Files can only be saved when a location is selected (level four or five in the Inventory) prior to transferring. The selected location code is displayed in the top left corner of the window (in this case VC for Visitor Center).

After editing a sign, you can transfer back to the Catalog to select a new sign type, or return to the Inventory. You will be asked to save the changes you made before another command is executed.

File	Transfer	System	F1 = Help
		C:\SM\SPECS\STANID.SPC	
VC-003			
Sign Type : STANID	Page : 5.5-7	Requisition No. : 97-12345	
Spec Code : HDO-01	By : John Brown	Manufacturer : Unicor	
Status : Compliant	Date : 06-14-1994	Install(ed) : 03-12-1987	
Legend/Symbol		Panel	Installation
Size (A/M) : 2"	Size : 32" x 9"	Mounting : Ground	
Length : 17.75"	Qty : 1	Postsize : 4" x 4"	
Grid : 1-1	HAGL : 60"	Qty : 1	
Color : White	Color : Corps Brown	VW.Dist : 25'	
Message		Helvetica Bld	Remarks
Primary: North Creek			
Secondary: Visitor Center		Cost	
		Sign Price : \$0.00	
		Installation : \$0.00	
		Total Cost : \$0.00	

<b>F1</b> Help	<b>F3</b> Edit	<b>F5</b> Sign Name	<b>F7</b> Save	<b>F9</b> Pause	<b>ESC</b>
<b>F2</b> Load	<b>F4</b> Print	<b>F6</b> Go to ...	<b>F8</b> Save As...	<b>F10</b> Quit	<b>?</b> Select

## File menu



## Load command <F2>

Opens a dialog box with a list of all specification files. Specification files are named after the sign type they refer to: BTR02.SPC for a BTR-02 sign type. Specification files can be either specific, relating to a single sign type (for example, the BTR-01.SPC specification file for the BTR-01 sign type), or generic, relating to multiple sign types (for example, the RS-000.SPC specification file for all recreation symbol signs). Since generic files do not refer to a specific sign type, they cannot be saved in the sign Inventory. Generic specification files have an extension of -A (grid A), -B (grid B), -C (grid C), or 0 (zero number extension). They can, however, be opened and you may browse through the file to review the specifications.

*Note* To quickly move through the specification list, you can type the first letter of the file you are looking for. The program will look for the nearest file with a name beginning with the keyboard entry. You may also use <PgUp> or <PgDn>.

## Edit command <F3>

Moves the cursor inside the window and allows you to change the specifications that are not dimmed. To edit a specification, select it by moving the cursor to the desired location and press <Enter>. If the criteria can be edited, one of the following windows will appear.

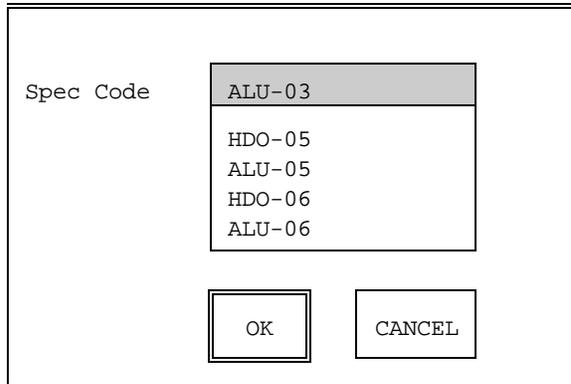
*Matrix Box* For selection of specifications that are linked to other criteria. Selection occurs in groups of criteria. Shown is a matrix that highlights the current selection. Selecting a group of specifications is done by moving the cursor <Up> or <Down>. Also indicated in the matrix box is the *preferred* legend height for the selected viewing distance. The *selected* viewing distance refers to the distance calculated with the legend height currently selected (highlighted).

Matrix						
-A/M-	-Spec-	-Panel Size-	-HAGL-	-Mounting-	- Post-	-Qty-
.5"	ALU-05	6" x 7.33"	60"	Ground	4" x 4"	1
.5"	HDO-05	6" x 7.33"	60"	Ground	4" x 4"	1
.75"	ALU-05	9" x 11"	60"	Ground	4" x 4"	1
.75"	HDO-05	9" x 11"	60"	Ground	4" x 4"	1

Viewing Distance: 25' Preferred (A): 0.8929" Preferred (M): 0.4464"  
 Selected : 14' Selected (A): 0.5000" Selected (M): 0.5000"

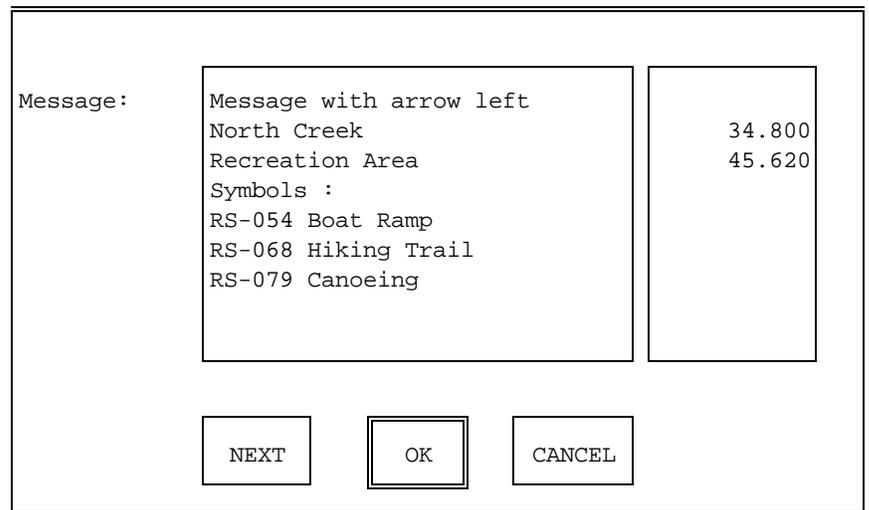
**Edit command  
continued**

*Selection Box* For selection of individual specifications. If a blank field is shown, any entry is allowed. If a Scroll window is shown, a selection must be made.



A dialog box titled "Spec Code" with a list box containing the following items: ALU-03 (highlighted), HDO-05, ALU-05, HDO-06, and ALU-06. Below the list box are two buttons: "OK" and "CANCEL".

*Message Box* For editing sign messages. Lines displayed in gray are locked and cannot be edited. Signs that have calculated messages will display the line length after the line in the selected capital letter size. Directional signs have a special format when entered. To calculate sign size correctly, first identify the direction using the plus (+) and minus (-) keys, then enter the sign message. No empty lines should be left between messages!



A dialog box titled "Message:" with a text area containing the following text: "Message with arrow left", "North Creek", "Recreation Area", "Symbols :", "RS-054 Boat Ramp", "RS-068 Hiking Trail", and "RS-079 Canoeing". To the right of the text area is a column of numbers: "34.800" and "45.620". Below the text area are three buttons: "NEXT", "OK", and "CANCEL".

*Note* Specifications that do not activate a dialog box cannot be edited. To create custom signs, you can select the "CST-01.SPC", "CST-02.SPC", or "CST-03.SPC" specification file, or select "Custom Signs" listed under "Recreation signs" in the Catalog. To create custom signs of particular sign types such as industrial safety, hours signs, etc., select the desired sign type and select the sign with the abbreviation -CS (Custom) after the sign type. This is usually the first sign type shown in a range. This will allow for a custom legend for that particular sign type.

**Save command** Saves the current file from memory in the Inventory database and updates links.  
<F7>

*Note* Active only if a file is already saved or an existing file is edited.

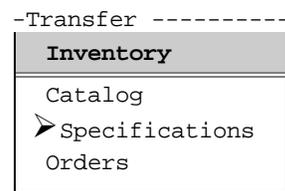
**Save as... command** Saves the current file in the Inventory and updates links. Selecting this command will initiate a search for the next sign ID number in the location. This number will then be displayed in a dialog box. You may change this number manually or by using the “Find Next Number” or “Find Available Number” button commands.  
<F8>

*Note* Active if a location file has been accessed in the Inventory (level four or five).

**Print command** Prints the specification file currently accessed.  
<F4>

**Default command** Allows you to enter a default for “By” (person entering information), “Requisition number”, and “Manufacturer”. While editing a sign you may enter these defaults, using the <F5> key.  
<F5>

## Transfer menu



**Inventory command** Transfers control to the Inventory of the program. The files that have been modified last will be opened and displayed in a window.

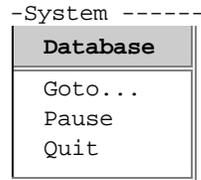
**Catalog command** Transfers control to the Catalog of the program to select a sign type. When creating a new sign and transferring from Inventory to Catalog, make sure you have selected a location to save the new sign into, prior to transferring to the Catalog (transfer at level four or five). If not, you will not be able to save a sign in the Specifications section later on.

**Specifications command** Transfers control to the Specifications section of the program to select a specification file. When creating a new sign and transferring from Inventory to Specifications section, make sure you have selected a location to save the new sign into, prior to transferring to the Specifications section (transfer at level four or five). If not, you will not be able to save a sign. See the Specifications section of the program for more information on creating signs directly through the Specifications section.

*Note* If the command is dimmed, you are currently in the selected program. The easy way to enter a new sign is to first select a sign type in the Catalog, after which the correct specification file is accessed.

**Order command** Transfers control to the Order section of the program to generate or modify an order.

## System menu



### Database command

Selects the path to search for specification files (files with a .SPC abbreviation).

### Goto command

Searches the selected location for specified ID number and loads it into memory.

### Pause command

<F9>

Specifies the waiting time before the screen goes blank with the pause screen, displaying the time. To return to normal execution, press any key.

*Note* To deactivate screen save, enter "0" minutes.

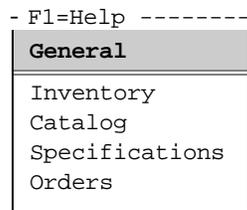
Pressing <F9>, activates pause screen, not the "Pause" command

### Quit command

<F10>

Exits program to DOS.

## Help menu



### General command

<F1 >

Transfers control temporarily to a General help program. The program contains information on sign types and their hierarchy, material specification codes, color codes, error codes, and diagrams for viewing distances and footings. While in the help program, you may switch to other available help files by using the <PgUp> and <PgDn> keys.

### All other commands

Transfers control temporarily to the specified help program. The program contains information on commands and key words. While in the help program, you may switch to other available help files by using the <PgUp> and <PgDn> keys.

# **Chapter Six**

## **Orders**

## Screen display

There are four levels of information in the Order section of the program. The first level shows a list of all orders generated and their particular status (proposed, ordered and received). Opening an order will give access to the second level showing the cover page of the order. Opening to the third level will give access to the sign order list. Lists are created by either searching for a particular criteria, or importing sign lists from another sign order. Signs can be viewed individually at level four.

File	Data	Transfer	Utilities	System	F1=Help	
		-		C:\SM\ORDERS\DISTRICT.ORD		
Order Number	Qty	Status	Cost (\$)	Manufacturer		
<b>F1</b> Help	<b>F3</b> Edit	<b>F5</b> Report	<b>F7</b> Export	<b>F9</b> Pause	<b>Esc</b>	
<b>F2</b> Open	<b>F4</b> Print	<b>F6</b>	<b>F8</b>	<b>F10</b> Quit	↓ Select	

## File menu

- File ----

<b>Open</b>
Close
New
Delete
Edit
Copy
Paste
Print
Secure

### Open command <F2>

Opens the selected file and displays its contents in a window. If only one file is present, the file is automatically selected, otherwise the cursor will move inside the window to select a file. At level two, order cover page, the open command will open the file containing a list of signs included in the order.

*Active* levels one to three

### Close command <Esc>

Closes the current file and returns to the previous level.

*Active* levels two to four

### New command

At level one, it will generate a new sign order as specified in the dialog box. At level three, the sign order list, it will initiate a search for one or more signs in the Inventory database by criteria as specified in the dialog box. Only those signs that are in the database can be

referenced in the sign order list. The database referenced is the database currently specified in the Inventory. Sign lists created only reference existing signs, they do not duplicate the sign in the database. Therefore, signs deleted in the Inventory database cannot be referenced and will not print. To prevent signs from being deleted in the Inventory database, you can select "Secure" in "File" menu and lock "ALL FILES" in the sign order. Files listed in the sign order will then be locked. To make sure you retain a copy of your order, including the database files, you can "Export" the order on a floppy disk. See "Export" for more information on duplicating orders. Search criteria in the dialog box are:

*Location* maximum three letter abbreviated location file name (BTR, SL, PIC, etc)

*ID. No.* sign identification code number (1, 001, 10\*, \*, 012, etc)

*Sign Type* sign type as listed in the matrix (STANID, APRDIR, BTR-01, etc)

*Spec Code* sign specification code (HDO-04, HDO, 06, ALU, etc)

*Req. No.* requisition number of the sign type (sign order number)

*Status* sign status (compliant, non-compliant, on order, proposed, in stock)

After searching and finding a sign matching the criteria, it will be listed in a dialog box where you can elect to add it to the sign order list or search for the next sign. When a sign is added to the sign order list, it will receive the same status as the sign order ("Proposed" or "On Order"), and the sign order requisition number. Before a sign is added to the list, you must enter the quantity of the particular sign type you would like to order. Quantities can be edited at any time using the "Edit" command.

*Active* levels one and three

#### **Edit command <F3>**

Modifies an existing order as specified in the dialog window.

- At level one, modification of the sign order requisition number will initiate a search of files listed in the sign order list and edit the requisition number in the sign file.
- At level two, the cursor will move inside the window and you can edit any item listed. Move the cursor to the desired item using the cursor keys and press the <Enter> key. The only item that cannot be edited is the quantity of signs, which is calculated automatically when adding or subtracting signs to the sign order list. When editing the status of the sign order at level two, a powerful feature will be activated. If the status of the order is changed to "On Order" or "Proposed", all signs listed in the sign order list will receive the same status. However, when the status "Received" is selected, each sign in the Inventory can be assigned an individual status. Each sign will be listed in a dialog box and you can assign the particular sign status, depending on whether the sign order is processed, received or installed.
- At level three, the edit command allows you to modify the quantity of a particular sign on the list.

*Active* levels one to three

*Note* If a file contains locked files/folders or is locked itself (dimmed on the screen), it cannot be edited. To unlock a file/folder (and enclosed files), select the “Secure” command under the “File” menu.

### **Delete command**

At level one, it will delete the selected order and sign order list of that particular order. At level three, it will delete the selected file from the sign order list. The sign itself will not be deleted, only the listing in the sign order list. Once a order is deleted, it cannot be retrieved; use caution when selecting this command. If a sign order is accidentally erased, the actual sign order list can be recreated quite easily by searching the database for signs with the requisition number of the deleted file.

*Active* levels one and three

*Note* If a file contains locked files/folders or is locked itself (dimmed on the screen), it cannot be deleted. To unlock a file/folder (and enclosed files), select the “Secure” command in the “File” menu.

### **Export command <F5>**

This command will export the sign order list and the actual database referenced. Before exporting, a dialog box will ask for the destination path of the exported file. The path may include drive and directories (for example A:, C:\Export\, etc). Make sure your destination drive ends with a colon (:) or backslash (\).

*Active* level one

*Note* Sign order lists that are exported to destinations containing files with identical file names will be added to those sign order lists.

### **Import command <F6>**

Imports external sign order lists and will add the referenced sign files to the sign Inventory. Before importing, a dialog box will ask you for a source path to retrieve the sign order from (for example A:, C:\Export\, etc). It will then import the files and ask the quantity of signs you would like to add.

*Active* level three

*Note* Make sure your destination drive ends with a colon (:) or backslash (\).

### **Print command <F4>**

Prints the selected order as specified in the dialog box. To scan a sign order, you might want to print out only a summary sheet or a one line description of each sign. A full print out of a sign order contains all signs in the sign order list (if present in the database) and an order cover page with a sign type summary listing the different sign types in the order. If only one file/folder is present, it is automatically selected; otherwise the cursor will move inside the window to choose a file. The file/folder will print as it is displayed on screen. Print commands are:

Print *-files*: prints all records in the file/folder.

*-summary*: prints only a summary page of the files in the sign order list.

Description *-short*: prints a one line summary of the sign specification.

*-long:* prints the entire specification of the sign.

**Copies** prints the specified number of printouts.

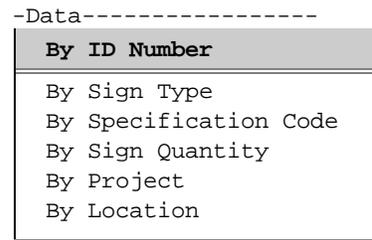
**Active** levels one and two

**Note** To choose print commands, move the cursor to the command with the <Tab> key and use the <Up> or <Down> key to select the command selection. The cover/summary page is the last page to print, since all files in the sign list must be processed and evaluated.

**Secure command**

Locks or unlocks a selected file. If only one (1) file/folder is present, it is automatically selected, otherwise the cursor will move inside the window to choose a file. Used to prevent accidental erasure or modification. You may secure a single file or folder or all files located within the folder. Secured files/folders or files located in a secured folder cannot be edited, deleted, or added to. To reverse the command, select the file/folder with the “Secure” command again.

**Data menu**

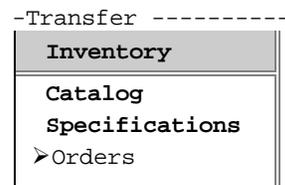


**All sorting commands**

Controls the display of files in the opened sign order list. Data can be sorted in ascending or descending order and by the criteria as listed in the menu. Display of a file is “remembered” as last specified and indicated in the menu with an arrow.

**Active** level three, sign order list

**Transfer menu**



**Inventory command**

Transfers control to the Inventory of the program. The files that have been modified last will be opened and displayed in a window.

**Active** All level

**Note** If the command is dimmed, you are currently in the selected program.

**Catalog command**

Transfers control to the Catalog of the program to select a sign type. When creating a new sign and transferring from Inventory to Catalog, make sure you have selected a location to

save the new sign into prior to transferring to the Catalog (transfer at level four or five). If not, you will not be able to save a sign in the Specifications section later on.

*Active* All levels

*Note* If the command is dimmed, you are currently in the selected program.

**Specifications command** Transfers control to the Specifications section of the program to select a specification file. When creating a new sign and transferring from Inventory to Specifications section, make sure you have selected a location to save the new sign into, prior to transferring to the Specifications section (transfer at level four or five). If not, you will not be able to save a sign. See the Specifications section of the program for more information on creating signs directly through the Specifications section.

*Active* All levels

*Note* If the command is dimmed, you are currently in the selected program. The easy way to enter a new sign is to first select a sign type in the Catalog, then the correct specification file is accessed.

**Orders command** Transfers control to the Order section of the program to generate or modify an order.

*Active* In Inventory, Catalog, and Specifications.

*Note* If the command is dimmed, you are currently in the selected program

## System menu

```
-- System ----  
Database  
Pause  
Quit
```

**Database command** Selects the path to search for order files.

*Active* Always

**Pause command <F9>** Specifies the waiting time before the screen goes blank with the pause screen, displaying the time. To return to normal execution, press any key.

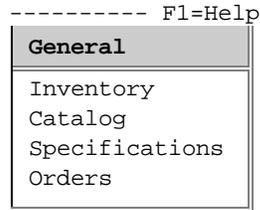
*Active* All levels

*Note* To deactivate screen save, enter "0" minutes. Pressing <F9>, activates pause screen, not the "Pause" command.

**Quit command <F10 >** Exits program to DOS.

*Active* All levels

## Help menu



**General command <F1 >** Transfers control temporarily to a general help program. The program contains information on sign types and their hierarchy, material specification codes, color codes, error codes, and diagrams for viewing distances and footings. While in the help program, you may switch to other available help files by using the <PgUp> and <PgDn> keys.*Active* All levels

**Inventory command** Transfers control temporarily to the Inventory help program. The program contains information on commands and key words. While in the help program, you may switch to other available help files by using the <PgUp> and <PgDn> keys.

*Active* All levels

**Catalog command** Transfers control temporarily to the Catalog help program. The program contains information on commands and key words. While in the help program, you may switch to other available help files by using the <PgUp> and <PgDn> keys.

*Active* All levels

**Specifications command** Transfers control temporarily to the Specifications help program. The program contains information on commands and key words. While in the help program, you may switch to other available help files by using the <PgUp> and <PgDn> keys.

*Active* All levels

**Order command** Transfers control temporarily to the Order help program. The program contains information on commands and key words. While in the help program, you may switch to other available help files by using the <PgUp> and <PgDn> keys.

*Active* All levels

## Appendix A

Prior to using the installation program, backup all the program disks supplied with the manual and store the originals in a dry, safe place.

Before running the installation utility program, verify the following default settings which will be used when installing the program. If these settings are not correct or if you would like to use different names, you can modify the entries when running the installation program.

- The floppy disk drive from which the disks are being read is disk drive “A:”
- The destination hard drive to install the Sign Manager programs on is disk drive “C:”
- Directory name where Sign Manager programs will be located is “SM”

### Start program installation

- *Insert disk #4, “Orders and Installation” disk in floppy disk drive “A” and type “A:INSTALL”*

The installation utility will load and a dialog box will appear asking if you would like to install the Sign Manager program.

- *Press <Enter> to activate the “Install” button, or press <Esc> to quit and return to DOS*

### Floppy drive to read from

- *Type your floppy drive name “A:” ( include the colon) and press<Enter>*

The floppy drive will be verified.

### Hard disk to install on

- *Type your hard disk drive name “C:” (include the colon) and press <Enter>*

The hard drive will be verified.

### Directory name

- *Type your directory name “SM” and press <Enter>*

The directory will be verified.

### Help files

A dialog box will appear asking if you would like to install the on-line help files. If you need space on your hard drive and are familiar with the program, you may elect not to install these files. The program will perform perfectly without these additional help files.

- *Press <Enter> to activate the “Yes, Install” button, or select the “No, Continue” button*

A dialog box will appear asking to insert disk #1, “Program”.

### Swap disks

- *First remove disk #4, “Orders and installation”, then insert disk #1, “Program”, and finally press <Enter> to continue the installation*

You will repeat this procedure with all other disks, until all files have been copied and the message “Installation was successful” appears. After pressing <Enter> the program will return command to DOS and you can activate the program by typing “SM” (or your own file name).

## Appendix B

Symbols are listed alphabetically and numerically. Symbols may be found several times in the alphabetic listing, since a symbol can be listed as “Picnic Shelter” and “Shelter, Picnic”.

<b>Alphabetic listing</b>	<b>Symbol</b>	<b>Number</b>	<b>Symbol</b>	<b>Number</b>
	All-Terrain Vehicle Trail	RS-095	Horse Trail	RS-064
	Amphitheater	RS-070	Hunting	RS-072
	Automobiles	RS-003	Ice Fishing	RS-092
	Baseball	RS-096	Ice Skating	RS-050
	Bicycle Trail	RS-066	Information	RS-014
	Boat Tour	RS-087	Kennel	RS-045
	Bus Stop	RS-031	Ladder Fish	RS-089
	Campfires Permitted	RS-042	Launching Ramp	RS-054
	Campground	RS-038	Laundry	RS-085
	Canoeing	RS-079	Lifejackets	RS-094
	Cleaning, Fish	RS-093	Lighthouse	RS-007
	Cross Country Skiing	RS-046	Litter Receptacle	RS-086
	Dam	RS-009	Lodging	RS-018
	Deer Viewing	RS-011	Lookout Tower	RS-006
	Diving	RS-062	Marina	RS-053
	Diving, Scuba	RS-060	Men’s Restroom	RS-021
	Drinking Water	RS-013	Motor Bike Trail	RS-065
	Dumpster, Trash	RS-091	Motorboating	RS-055
	Environmental Study Area	RS-076	Off-Road Vehicle Frail	RS-067
	Exercise Fitness Area	RS-097	Parking	RS-034
	Falling Rocks	RS-008	Pedestrian Crossing	RS-016
	Ferry, Vehicle	RS-033	Pet on leash Permitted	RS-017
	Fire Extinguisher	RS-090	Picnic Shelter	RS-039
	First Aid	RS-024	Picnic Site	RS-044
	Fish Cleaning	RS-093	Playground	RS-069
	Fish Hatchery	RS-010	Point of Interest	RS-080
	Fish Ladder	RS-089	Post Office	RS-026
	Fishing Area	RS-063	Ramp, Launching	RS-054
	Fishing, Ice	RS-092	Ranger Station	RS-015
	Fitness Area, Exercise	RS-097	Rattlesnake	RS-099
	Food Service/Restaurant	RS-019	Receptacle, Litter	RS-086
	Gas Station	RS-005	Recreation, Winter	RS-077
	Grocery Store	RS-020	Restaurant/Food Service	RS-019
	Handicapped	RS-028	Restroom, Men’s	RS-021
	Hatchery, Fish	RS-010	Restroom, Women’s	RS-023
	Hiking Trail	RS-068	Restrooms	RS-022

<b>Alphabetic listing</b>	<b>Symbol</b>	<b>Number</b>	<b>Symbol</b>	<b>Number</b>
continued	Rocks, Falling	RS-008	Four Boat	RS-087
	Rowboating	RS-057	Tower, Lookout	RS-006
	Sailing	RS-056	Trail Shelter	RS-043
	Sanitary Station, Trailer	RS-041	Trail, All-Terrain Vehicle	RS-095
	Scuba Diving	RS-060	Trail, Bicycle	RS-066
	Shelter, Picnic	RS-039	Trail, Hiking	RS-068
	Shelter, Sleeping	RS-037	Trail, Horse	RS-064
	Shelter, Trail	RS-043	Trail, Motor Bike	RS-065
	Showers	RS-035	Trail, Off-Road Vehicle	RS-067
	Site, Picnic	RS-044	Trailer Sanitary Station	RS-041
	Site, Trailer	RS-040	Trailer Sites	RS-040
	Skateboard	RS-098	Trash Dumpster	RS-091
	Skating, Ice	RS-050	Trucks	RS-004
	Skiing, Cross Country	RS-046	Tunnel	RS-032
	Sledding	RS-049	Vehicle 1 Ferry	RS-033
	Sleeping Shelter	RS-037	Viewing Area	RS-036
	Smoking	RS-002	Viewing, Deer	RS-011
	Snack Bar	RS-1 ()2	Wading	RS-088
	Snowshoeing	RS-078	Water, Drinking	RS-013
	Snowmobiling	RS-052	Waterskiing	RS-058
	Store, Grocery	RS-020	Winter Recreation	RS-077
	Swimming	RS-061	Women's Restroom	RS-023
	Telephone	RS-025		

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<b>Numeric listing</b>	<b>Symbol</b>	<b>Number</b>	<b>Symbol</b>	<b>Number</b>
	Smoking	RS-002	Pet on leash Permitted	RS-017
	Automobiles	RS-003	Lodging	RS-018
	Trucks	RS-004	Restaurant/Food Service	RS-019
	Gas Station	RS-005	Grocery Store	RS-020
	Lookout Tower	RS-006	Men's Restroom	RS-021
	Lighthouse	RS-007	Restrooms	RS-022
	Falling Rocks	RS-008	Women's Restroom	RS-023
	Dam	RS-009	First Aid	RS-024
	Fish Hatchery	RS-010	Telephone	RS-025
	Deer Viewing	RS-011	Post Office	RS-026
	Drinking Water	RS-013	Handicapped	RS-028
	Information	RS-014	Bus Stop	RS-031
	Ranger Station	RS-015	Tunnel	RS-032
	Pedestrian Crossing	RS-016	Vehicle Ferry	RS-033

<b>Numeric listing</b>	<b>Symbol</b>	<b>Number</b>	<b>Symbol</b>	<b>Number</b>
	Parking	RS-034	Point of Interest	RS-080
	Showers	RS-035	Laundry	RS-085
	Viewing Area	RS-036	Litter Receptacle	RS-086
	Sleeping Shelter	RS-037	Tour Boat	RS-087
	Campground	RS-038	Wading	RS-088
	Picnic Shelter	RS-039	Fish Ladder	RS-089
	Trailer Sites	RS-040	Fire Extinguisher	RS-090
	Trailer Sanitary Station	RS-041	Trash Dumpster	RS-091
	Campfires Permitted	RS-042	Ice Fishing	RS-092
	Trail Shelter	RS-043	Cleaning, Fish	RS-093
	Picnic Site	RS-044	Fish Cleaning	RS-093
	Kennel	RS-045	Lifejackets	RS-094
	Cross Country Skiing	RS-046	All-Terrain Vehicle	RS-095
	Skiing, Cross Country	RS-046	Trail	RS-096
	Sledding	RS-049	Baseball	RS-097
	Ice Skating	RS-050	Exercise Fitness	RS-098
	Snowmobiling	RS-052	Area	RS-099
	Marina	RS-( )53	Skateboard	RS- 102
	Launching Ramp	RS-054	Rattlesnake	
	Motorboating	RS-055	Snack Bar	
	Sailing	RS-056		
	Rowboating	RS-057		
	Waterskiing	RS-058		
	Scuba Diving	RS-060		
	Swimming	RS-061		
	Diving	RS-062		
	Fishing Area	RS-063		
	Horse Trail	RS-064		
	Motor Bike Trail	RS-065		
	Bicycle Trail	RS-066		
	Off-Road Vehicle Trail	RS-067		
	Hiking Trail	RS-068		
	Playground	RS-069		
	Amphitheater	RS-070		
	Hunting	RS-072		
	Environmental Study Area	RS-076		
	Winter Recreation	RS-077		
	Snowshoeing	RS-078		
	Canoeing	RS-079		

## Appendix C

Some signs in the database need special treatment to obtain correct calculations, sizes, etc. All these signs have been listed below with special instructions for each particular problem.

DRSS-O, APRDIR,  
APRS-O, PRJDIR

### *Directional sign legend with "Direction Identifiers"*

Directional sign legends must be entered using "Direction Identifiers". The identifier tells the program how to calculate the correct panel size. If not entered properly, an improper panel size, post size and quantity may be calculated.

*Procedure: First, enter the identifier using plus (+) and minus (-) keys while the message box is shown, then enter the sign message. DO NOT leave empty lines between messages.*

*Identifiers are:*

- *Message with arrow right*
- *Message with arrow right 45°*
- *Message with arrow left*
- *Message with arrow left 45° ~ Message with arrow straight up*
- *Next message*

SAF-CS, SNO-CS,  
SDA CS, SWA-CS

### *Custom industrial safety with fifth legend line*

Default setting is "grid A" (four lines). To change to five legend lines, change the grid format to "grid B". Keep in mind that this will also change the capital legend size from 1A to .833A and thus decrease the viewing distance of the sign.

BTR-01

### *Sign panel size*

The default setup for the BTR-01.SPC specification file includes all optional legends as listed on page 7.23 of the sign manual. You may delete and edit any of the optional messages in the "Message" section of the specification file. The program will automatically calculate the correct panel size.

ENT-02

### *Sign panel size*

The default setup for the ENT-02.SPC specification file includes all optional legends as listed on page 7.5 of the sign manual. You may delete, add, and edit any of the optional messages in the "Message" section of the specification file. After entering the message you will be asked to supply the number of added optional messages. This refers to both one- and two-line messages. The program will then automatically calculate the correct panel size.

SLATCS

### *Custom slat sign legend lengths*

Since the amount of information necessary for a slat sign panel does not allow for calculation of custom sign legends, a calculating mechanism is provided with a custom slat sign specification file (SLATCS.SPC). If you are not sure whether or not a custom legend might fit on a slat, activate the specification file by selecting "Load" from the "File" menu and select "SLATCS". The specification file will load and you can enter your custom legend in the first two lines of the "Message" section. If the legend is too long, a "Line overflow" error message will appear.

## Appendix D

File error codes are listed below with a description of the error and possible cause of the error.

[E] refers to an error in data entry. [F] refers to an error in file input/output. [S] refers to a system or internal error. Always make sure you have a backup of your database to prevent loss of data.

### [E] Data entry errors

*[E1] Invalid path name: "Path Name"*

Wrong path name was specified. Path must address an existing drive and end with a colon (:), or backslash (\).

*[E2] Please use 00-00-0000 date format*

Incorrect date format was entered.

*[E3] Invalid range of ID numbers*

Overlapping range of numbers was specified.

*[E4] Invalid number of copies*

Number of copies must be larger than 0.

*[E5] Value must be equal to 0, or larger than 0.5 minutes*

0 minutes will deactivate the screen save, otherwise the time interval must be larger than 0.5 minutes.

*[E6] Invalid file name: "File Name"*

File name must consist of alpha numeric characters with a maximum of eight (no spaces).

*[E7] Duplicate project: "Project Name"*

District cannot contain identical project names. Rename the new project.

*[E8] Duplicate file name: "File Name"*

District cannot contain identical project file names. Rename the new project file name.

*[E9] Invalid code name: "Code Name"*

File name must consist of alpha numeric characters with a maximum of three (no spaces allowed).

*[E10] Duplicate location: "Location Name"*

Project cannot contain identical location names. Rename the new location.

*[E11] Duplicate file code: "File Code"*

Project cannot contain identical location file names. Rename the new location file name.

*[E12] Value must be larger than 0*

Sign ID number must be larger than 0 and smaller than 999.

*[E13] Duplicate sign ID code: "Sign ID Code"*

Location cannot contain identical 11) numbers. Rename the new 11) file.

*[E14] Cannot delete file\order, protected file was found*

To execute the command, "Unlock" the enclosed files using the "Secure" command in the "File" menu.

*[E15] No print overview on this level*

Print overview of a folder is only available at level one to three of the Inventory.

*[E16] No blank entry*

A valid entry must be made in the field.

*[E17] Tried to import a file with a duplicate code: "Code Name", please rename*

Database cannot contain identical file names. Rename the new file.

*[E18] Duplicate order: "Order Number"*

Database cannot contain identical order files. Rename the new order file.

*[E19] Quantity must be larger than 0*

Quantity of an ordered sign must be larger than 0.

[E20] Duplicate project name: "Project Name"  
Database cannot contain identical order files.  
Rename the new file.

**[E] Data entry errors**

[E21] *Cannot add to list; duplicate record was found*

Sign order list cannot contain identical files.  
The file will be skipped.

[E22] *Value must be between 0 and 48 inches*  
Capital letter height must be between indicated sizes.

[E23] *Value must be between 0 and 999 feet*  
Viewing distance ranges from 0 to 999 feet.

[E24] *Cannot clear, first line is locked*  
Directional sign messages always start with an identifier.

[E25] *This line is locked*  
The specification file will not allow this legend line to be modified.

[E26] *Trailing space found after line "x"*  
While editing the message, you have created a line with trailing space(s). Since these spaces are calculated, it is necessary to remove them before entering the message. Move to the end of the line "x" and press <Delete> to remove the space. You will see the line legend size of line "x" diminish. Repeat until all trailing spaces have been removed (line legend size will remain the same when deleting).

**[F] File input/output errors**

[F1] *File is locked*  
Command can not be executed since the file or folder is locked. Use "Secure" in the "File" menu to unlock the file.

[F2] *File SMHELP.EXE is missing*  
Help file is not properly installed or is not located in the same directory as the program.

[F3] *Paste on level "x", not level "y"*  
Copy and paste commands must be used on the same level (x and y).

[F4] *Cannot overwrite origin, please change path*

[E27] *Previous line already identified, please enter message*

A message can only be identified once.

[E28] *Can only identify the first line, please enter message*  
DRSS-3 and DRSS-4 must have an identifier on the first line.

[E29] *End of line; 38 characters only*  
Legend line can only contain 38 characters.

[E30] *Cannot calculate panel size; not all legends entered*  
For proper calculation of sizes, all legends must be entered properly.

[E31] *Line overflow*  
Sign type grid will not allow entry of more information on this line. Use next line to continue the message.

[E32] *Line overflow when using grid A; switch to grid B*  
Sign type grid will not allow entry of more information on this line. Use next line to continue the message or change the grid format to reduce the line length.

Database cannot be pasted over itself. To paste a new database, change the path name.

[F5] *Tried to paste project with duplicate file name; please rename*  
Database cannot contain file names.  
Rename the new file.

	<i>[F6] Path\file not found</i>	
	Tried to open non-existing file or file with a bad name.	
<b>[F] File input/output errors</b>	<i>[F7] File "File Name".SPC not found</i>	<i>[F8] File "File Name" is damaged; cannot load</i>
	Specification file is missing. Make sure the correct database path is specified for the specification files.	Specification file has been damaged or modified. Replace with new file.
<b>[S] System/internal errors</b>	<i>[S1] Out of memory Program is too large</i>	<i>[S11] File already exists</i>
	Do not use additional programs (automenu, screensave, etc.)	The file name specified is identical to a file name already in use on the diskette.
	<i>[S2] Out of string space</i>	<i>[S12] Disk is full</i>
	String variables exceed the amount of free memory remaining.	All disk storage space is in use.
	<i>[S3] Device timeout</i>	<i>[S13] Bad file name</i>
	Did not receive information from an Input/Output device within a predetermined amount of time.	An illegal form is used for the file name.
	<i>[S4] Device fault</i>	<i>[S14] Too many files</i>
	Indicates a hardware error.	An attempt is made to create a new file when all directory entries are full.
	<i>[S5] Out of paper</i>	<i>[S15] Disk not ready</i>
	The printer is out of paper or, a printer fault.	Occurs when the diskette drive door is open or a diskette is not in the drive.
	<i>[S6] Bad file name or number</i>	<i>[S16] Disk media error</i>
	A statement or command references a file with a file number that is not open or is out of range of file numbers specified at initialization.	Diskette controller detected a hardware fault.
	<i>[S7] File not found</i>	<i>[S17] Path/file access error</i>
	References a file that does not exist on the current diskette.	MS-DOS is unable to make a correct path-to-file name connection. The operation is not completed.
	<i>[S8] Bad file mode</i>	<i>[S18] Path not found</i>
		MS-DOS is unable to find the path specified. The operation is not completed.
	<i>[S9] File already open</i>	<i>[S19] Unknown internal error: "Code"</i>
	A sequential output mode "Open" is issued for a file that is already open, or a "Kill" is given for a file that is open.	Error message for alerting internal software execution errors.
	<i>[S10] Device input/output error</i>	<i>[S20] Invalid serial number</i>
	Usually a disk 1/0 error.	Check master diskette for the correct number.



Traffic	<b>R00-00</b> ; Regulatory <b>W00-00</b> ; Warning <b>PRK-00</b> ; Parking <b>NPK-00</b> ; No Parking	
Boundary	<b>BLM-01 /03</b> ; Property Markers <b>BLM-04/06</b> ; Wildlife Management Area Markers	
Industrial Safety	<b>SDA-00</b> ; Danger <b>SCA-00</b> ; Caution <b>SAF-00</b> ; Safety <b>SNO-00</b> ; Notice <b>SDR-00</b> ; Directional	
Regulatory	<b>REC-001</b> ; Title 36	
Office Interior	Directory Registry Directional  Identification	<b>INT-01/02</b> ; One/two column grid <b>INT-03/04</b> ; One/two column grid <b>INT-05</b> ; Large Ceiling <b>INT-06</b> ; Small Ceiling <b>INT-07</b> ; Wall mounted  <b>INT-08</b> ; Cube <b>INT-09</b> ; Office <b>INT-12</b> ; Employee <b>INT-10</b> ; Information <b>INT-11</b> ; Safety
Non Corps	<b>NONCRP</b> ; All non-standard signs	