

ROADWAY DESIGN APPS (RWD APPS)

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Command Line Apps

There are commands located in the Apps directory that can be typed at a command prompt that are shortcuts for quickly changing directories. In order to use the batch files from you must add the app directory to the systems directory path.

1. Click on the Windows Start Icon and open the CONTROL PANEL.
2. In the Control Panel, click the SYSTEM and SECURITY icon.
3. Click the SYSTEM option.
4. Locate the CHANGE SETTINGS option and click it.
3. Click on ADVANCED SYSTEM SETTINGS.
4. Locate and press the ENVIRONMENT VARIABLES button.
5. If you have Administrator rights, select the PATH variable in the SYSTEMS VARIABLES group box.
6. Click on the EDIT button, and add to end of the value already listed the path of the rwd apps directory. Do not delete the directories already listed. The path should be similar to this (... \rwd\data\apps). Note: Each variable setting must be separated with a semi-colon.
7. If you do not have Admin rights you can still add the path in the USER VARIABLE group section in the top section of the dialog. The difference in a user variable is that it is only available to you and not others who log in to your computer.
9. Click the OK button to save the values.

Change Directory Shortcuts

The following are the available apps for changing directory paths at a command line. The shortcut is typed at the command prompt to quickly change you to that directory.

b

Type in: **b**

Function: Backup one directory from current directory.

Filename: *b.bat*

Substitution for Command: *cd ..*

h

Type in: **h**

Function: Change directory to your personal HOME directory.

Filename: *h.bat*

Substitution for Command: *cd %HOMEPATH%*

%HOMEPATH% is a built-in system environment settings that is set when you log into the system. It will be the directory that was assigned on the Domain or Local Workstation. You may not be able to control user home accounts on your domain, but you still may be able to control the path. Use the following instruction if you wish to control the path...

Go to CONTROL>PANEL>ENVIRONMENT and set the USER VARIABLE as follows:

HOMEPATH= <to the directory you want to be your home directory>

This should send you to the set home directory when typing "h" at a prompt.

sys32

Type in: **sys32**

Function: Change to the WINDOWS NT SYSTEMROOT SYSTEM 32 directory. Currently this directory is c:\windows\system32 on most machines.

Filename: *sys32.bat*

Substitution for Commands:

c:

cd c:\%systemroot%\system32

sysroot

Type in: **sysroot**

Function: Change to the WINDOWS SYSTEM ROOT directory. Currently this directory is c:\windows on most machines.

Filename: *sysroot.bat*

Substitution for Commands:

c:

cd c:\%systemroot%

Directory List Shortcuts

ba

Type in: **ba**

Function: List all files that have a .ba extension. (Microstation Complied Macro Basic Files)

Filename: *ba.bat*

Substitution for Command: `dir /d /p*.ba`

Note: /d list files in sorted column format. /p pauses after one screen of output

bak

Type in: **bak**

Function: List all files that have a .bak extension. (Backup Files)

Filename: *bak.bat*

Substitution for Command: `ls -xpd *.bak`

Note: "ls" is an Unix emulation program located in the apps folder.

bat

Type in: **bat**

Function: List all files that have a .bat extension. (Batch Files)

Filename: *bat.bat*

Substitution for Command: `ls -xpd *.bat`

Note: "ls" is an Unix emulation program located in the apps folder.

bas

Type in: **bas**

Function: List all files that have a .bas extension. (Microstation Un-compiled Macro Basic Files)

Filename: *bas.bat*

Substitution for Command: `dir /d /p *.bas`

Note: /d list files in sorted column format. /p pauses after one screen of output

cel

Type in: **cel**

Function: List all files that have a .cel extension. (Microstation Cell Library Files)

Filename: *cel.bat*

Substitution for Command: `dir /d *.cel`

Note: /d list files in sorted column format

cor

Type in: **cor**

Function: List all files that have a .cor extension. (Geopak Coordinate ASCII files)

Filename: *cor.bat*

Substitution for Command: `dir /d *.cor`

Note: /d list files in sorted column format

doc

Type in: **doc**

Function: List all files that have a .doc extension. (Microsoft Word Files)

Filename: *doc.bat*

Substitution for Command: `dir /d *.doc`

Note: `/d` list files in sorted column format

docx

Type in: **docx**

Function: List all files that have a .docx extension. (Microsoft Word Files)

Filename: *docx.bat*

Substitution for Command: `ls -CF *.docx`

Note: "ls" is an Unix emulation program located in the apps folder

dgn

Type in: **dgn**

Function: List all files that have a .dgn extension (Microstation Design Files).

Filename: *dgn.bat*

Substitution for Command: `dir /d *.dgn`

Note: `/d` list files in sorted column format

dgnlib

Type in: **dgnlib**

Function: List all files that have a .dgnlib extension (Microstation Design File Libraries).

Filename: *dgnlib.bat*

Substitution for Command: `dir /d *.dgnlib`
Note: `/d` list files in sorted column format

exe

Type in: **exe**

Function: List all files that have a `.exe` extension. (Executable Files)

Filename: *exe.bat*

Substitution for Command: `ls -xpd *.exe`

Note: "ls" is an Unix emulation program located in the apps folder.

gpk

Type in: **gpk**

Function: List all files that have a `.gpk` extension. (Geopak Cogo Database Files)

Filename: *gpk.bat*

Substitution for Command: `ls -xpd *.gpk`

Note: "ls" is an Unix emulation program located in the apps folder.

inp

Type in: **inp**

Function: List all files that have a `.inp` extension. (Geopak Input Files)

Filename: *inp.bat*

Substitution for Command: `ls -xpd *.inp`

Note: "ls" is an Unix emulation program located in the apps folder.

l

Type in: **l** (*This is a lower case "L"*)

Function: List all files in a directory with *ls -xpd*

Filename: *l.bat*

Substitution for Command: *ls -xpd*

Note: "ls" is an Unix emulation program located in the apps folder.

pdf

Type in: **pdf**

Function: List all files that have a .pdf extension. (Adobe Portable Document Files)

Filename: *pdf.bat*

Substitution for Command: *ls -xpd *.pdf*

Note: "ls" is an Unix emulation program located in the apps folder.

pltcfg

Type in: **pltcfg**

Function: List all files that have a .pltcfg extension. (*Microstation Plot Driver XML Files*)

Filename: *pltcfg.bat*

Substitution for Command: *dir /d *.pltcfg*

Note: /d list files in sorted column format

prj

Type in: **prj**

Function: List all files that have a .prj extension. (*Geopak Project Manager Files*)

Filename: *prj.bat*

Substitution for Command: `dir /d *.prj`

Note: /d list files in sorted column format

rsc

Type in: **rsc**

Function: List all files that have a .rsc extension. (*Resource Files*)

Filename: *rsc.bat*

Substitution for Command: `ls -xpd *.rsc`

Note: "ls" is an Unix emulation program located in the apps folder.

sid

Type in: **sid**

Function: List all files that have a .sid extension. (*Mr. Sid Raster Files*)

Filename: *sid.bat*

Substitution for Command: `ls -xpd *.sid`

Note: "ls" is an Unix emulation program located in the apps folder.

tif

Type in: **tif**

Function: List all files that have a .tif extension. (*Raster File*)

Filename: *tif.bat*

Substitution for Command: `dir /d *.tif`
Note: `/d` list files in sorted column format

txt

Type in: **txt**

Function: List all files that have a `.txt` extension. (Text Files)

Filename: *txt.bat*

Substitution for Command: `ls -xpd *.txt`

Note: "ls" is an Unix emulation program located in the apps folder.

ucm

Type in: **ucm**

Function: List all files that have a `.ucm` extension. (User Command Files)

Filename: *ucm.bat*

Substitution for Command: `ls -xpd *.ucm`

Note: "ls" is an Unix emulation program located in the apps folder.

x

Type in: **x**

Function: List all files that have a `.x` extension. (Geopak 3PC Files)

Filename: *x.bat*

Substitution for Command: `ls -xpd *.x`

Note: "ls" is an Unix emulation program located in the apps folder.

xls

Type in: **xls**

Function: List all files that have a .xls extension. (Excel Files)

Filename: *xls.bat*

Substitution for Command: `ls -xpd *.xls`

Note: "ls" is an Unix emulation program located in the apps folder.

xlsm

Type in: **xlsm**

Function: List all files that have a .xlsm extension. (Excel Files w/macros)

Filename: *xlsm.bat*

Substitution for Command: `ls -xpd *.xlsm`

Note: "ls" is an Unix emulation program located in the apps folder.

xlsx

Type in: **xlsx**

Function: List all files that have a .xlsx extension. (Excel Files)

Filename: *xlsx.bat*

Substitution for Command: `ls -xpd *.xlsx`

Note: "ls" is an Unix emulation program located in the apps folder.

zip

Type in: **zip**

Function: List all files that have a .zip extension.

Filename: *zip.bat*

Substitution for Command: `ls -xpd *.zip`

Note: "ls" is an Unix emulation program located in the apps folder.

UNIX Emulation Commands

These commands were put together as a means for doing UNIX-Like commands. These commands come from various sources and are similar but not identical to the same commands available under other UNIX operating systems.

Some of these commands are being used inside of batch files and other programs inside the RWD APPS folder. So they should not be deleted.

lo

Type in: **lo**

Function: Similar to typing in the DOS command EXIT. Purpose is to close the Command Window.

Filename: *lo.bat*

Substitution for Command: `exit`

Under UNIX the more common command to exit the window was "lo" and not "exit". "lo" was short for logoff.

cat

Concatenate and/or display files

Synopsis

`cat [-behnstuv] [name ...]`

Description

cat reads a file and writes it to the standard output. If more than one file is given, the files are concatenated and written in sequence to the standard output. If a file name is not given, or a dash (-) is given as a file name, cat reads from the standard input.

Options

The options may be specified separately.

- b Omits line numbers from blank lines when used with the n option.
- e When given with -v, displays a dollar sign (\$) at the end of each line.
- h Display a longer help message.
- n Displays the output lines numbered sequentially from 1.
- s Squeezes multiple blank lines into one line.
- t When specified with -v, displays tab characters as ^I.
- v Displays non-printing characters. For example, the delete character (octal 0177) prints as ^? and non-ASCII characters (with the high bit set) are printed as M- followed by the character of the low 7 bits.

Examples

```
C:> cat news
```

cat writes the file named news to the standard output.

```
C:> cat cup1 cup2 > cup3
```

cat concatenates the first two files and places the result in the third.

Special Considerations

When more than one file name is given on the command line, cat prints the contents of the files without indicating where one file ends and another file begins.

Command formats such as:

```
cat file1 file2 > file1 and cat file1 file2 > file2
```

will destroy the input files before reading them.

cp

Copy Files

Filename: *cp.exe*

Synopsis

`cp [-hipnv] file1 file2`

`cp [-hiprnv] file ... directory`

In the first form file1 is copied to file2.

In the second form one or more files are copied into the specified directory, retaining their original names.

Description

cp copies files. cp copies one file to another file, or one or more files to another directory. The files being copied are not destroyed.

When file1 is copied to file2 and file2 already exists, file2's contents are erased and file1 is then copied into file2. file2's visibility modes (System or Hidden bits) are preserved.

When file1 is copied to file2 and file2 does not exist, file2 is created with the default visibility modes (not System and not Hidden). file1 is then copied to file2. file2 is then set with file1's access modes.

Options

- h Display a short help message.

- i Prompt the user with the name of the file whenever the copy will cause an existing file to be overwritten. Giving a y in response causes cp to continue. Any other response prevents overwriting the file.

- p Preserve date stamps and access modes.

- r When any source files are directories, cp copies each subtree rooted at that name; the destination must be a directory.

- n Copy newer files only. Prevents existing files from being overwritten by older or equal files. Note that only the timestamp is checked, and not the file size or contents.

- v Announce the names of the source and destination files as they are copied.

file

Determines file types.

Synopsis

```
file [ -c ] [ -z ] [ -L ] [ -f namefile ] <file_name>
```

Note

This program uses the **magic** file in the same directory as this program. **DO NOT REMOVE IT.**

Description

File tests each argument in an attempt to classify it. There are three sets of tests, performed in this order:

filesystem tests, magic number tests, and language tests.

The first test that succeeds causes the file type to be printed.

The type printed will usually contain one of the words text (the file contains only ASCII characters and is probably safe to read on an ASCII terminal), executable (the file contains the result of compiling a program in a form understandable to some UNIX kernel or another), or data meaning anything else (data is usually 'binary' or non-printable). Exceptions are well-known file formats (core files, tar archives) that are known to contain binary data.

If an argument appears to be an ASCII file, file attempts to guess its language.

The -z tries to look inside compressed files.

The -f name file option specifies that the names of the files to be examined are to be read (one per line) from name file before the argument list. Either name file or at least one filename argument must be present; to test the standard input, use "-" as a filename argument.

fgrep

```
fgrep [options] target {@file}
```

Pupose

FGREP (Fast GREP) is a small utility that can be used to find strings of characters in ASCII text files, and arbitrary sequences of bytes in other files. String search capabilities are not extensive (no regular expressions), but FGREP is small and very, very fast. FGREP is intended to replace the FIND filter with something faster and more flexible.

UNIX people: we fully realize that this isn't the grep or fgrep with which you are familiar. We know that the RE in GREP means "regular expressions" and that we don't support regular expressions. However, the name serves to point people in the right direction.

Syntax

```
FGREP [options] target {@file}
```

There are many *options*, but the most common use is very simple:

```
FGREP hello myfile.txt
```

This command would display all lines of MYFILE.TXT that contain the character string "hello".

Options

These are the option switches that control how FGREP works. All switches are case-insensitive except -m/M, and -b/B; for example, either -a or -A will set ANSI mode. All switches must precede the target on the command line, but they may be in any order. If you specify conflicting switches, the last one will be effective.

-a

is ANSI mode. If you have ANSI.SYS (or equivalent) installed, escape characters (ASCII 27) in displayed text lines can cause odd results. If you use the -A switch, FGREP will substitute an upside-down question mark (") for ESC, possibly resulting in cleaner displays. You'll only need this switch if you have ANSI installed and there are ESC characters in the files you're scanning. Ignored in binary mode.

-c

makes the search case sensitive ("String" will not match "string" or "STRING"). Normally, FGREP ignores case. This switch is ignored in binary mode. Using -c will generally result in faster searches.

-f

causes the "***File" header lines to be displayed only for those files that contain the search string.

-i

specifies an "input field" or "search field," allowing you to search only a part of each line. See "Limiting searches to specified columns ", below.

-l

adds line numbers to FGREP's output.

-m or -M

specify Microsoft (R) output format. See "Output" above. If -m is used, only the filename will appear. If -M is used, the full filespec (including drive and path) will be included. Ignored in binary search mode.

-o

specifies a maximum output width. It should be followed by a decimal number from 0 to 50000. For example, -o40 causes FGREP to truncate all output to a maximum of 40 characters per line. If you specify -o0, no text will be displayed at all. This is not useful for the normal display, but you can use this feature with -l, -m, or -M if you want to display just the line numbers where the text was found but not the text itself.

-p

pauses on full screen of output.

-r

recursive (subdirectory) search. For each filespec provided, FGREP searches the specified directory and all subdirectories for matching file names. If no directory is specified, FGREP begins the search with the current directory. For example:

```
fgrep -r "text" *.c d:\src\*.c
```

This command searches all *.c files in the current directory and all of its subdirectories; then it searches all *.c files in D:\SRC and all of its subdirectories.

-s

suppresses the "***File" header lines in the output.

-t

displays only the actual text found (rather than the entire line containing the text). This is useful with wildcards; for example, the command

```
fgrep -t "??rse" dict.txt
```

might display "parse", "purse", "horse", etc. (perhaps displaying all words from a text dictionary that match the pattern). Note that the displayed text will be all lowercase if the search is case insensitive; and, any embedded spaces will be missing if the search is white space insensitive (-w option). -t and -v (reverse search) are incompatible.

-v

provides a reverse or negative search. That is, all lines that do NOT contain the specified string are displayed. This provides a handy way to get rid of lines containing specified text. Suppose, for example, that you have a file containing a list of file names, and you are interested in all files EXCEPT those that contain a '\$' in the name (perhaps they are temporary files):

```
FGREP -v "$" filename
```

-w

indicates that white space (blanks and tabs) is not significant. White space in both the search string and the input file will be ignored. If -w is specified, the wildcard character (?) will match any non-blank character. Ignored in binary mode.

-x

suppresses the display of the program logo/copyright.

-Zb

filter "bells" from output. Before displaying the text of lines containing the target string, FGREP changes any "bell" characters (character 7) to spaces, which prevents the system from beeping at you.

-Zd

causes FGREP to display the name of each directory as it begins to search the directory. This is intended mostly for recursive searches (-r option).

-Zl

causes FGREP to send its logo to the standard output device instead of the standard error device. This allows the logo and version number to be captured in redirected output files and is intended mostly for use by other programs that perform post-processing on FGREP output.

-O

("0" text lines) suppresses the display of lines of text containing the specified string. FGREP will skip immediately to the next file when the string is found. The -0 option is most commonly used with -f (-f0) to simply display a list of files containing the target string.

Note that -0 is different in effect from -o0; when combined with -l or -m, the -o0 option will display line numbers and/or filenames, but -0 will display nothing.

-1

("1" text line) specifies that only the first line containing the specified string in each file will be displayed. FGREP will then skip immediately to the next file.

-@

causes FGREP to display ONLY a list of files that contain the search target. No text is displayed or other information is displayed. This option is useful to create a file containing a list of files for further processing by other programs. For example:

```
FGREP -@ "stuff" *.txt > list.txt
```

On completion of this run, the file LIST.TXT will contain a list of the files that contain "stuff".

Targets

The target is what you're looking for in the file. There are two ways to specify targets: as strings and as series of hexadecimal bytes. The two can be combined in a single target specification.

Strings are sequences of ASCII characters, like "hello".

Normally, you can just type in the string and forget it, but you may have to "delimit" the string, i.e., bracket it by a pair of matching non-alphanumeric characters (anything except '-' and '\$'):

'string'

/string/

.string.

Choose a delimiter that does not appear in the string. This is no good:

'you've made a mistake'

Delimiters are required for a string target if any of these four conditions are met:

-- it is combined with hex byte sequences (more below)

-- it contains spaces or tabs

- it begins with a non-alphanumeric character
- it contains the redirection characters < > |.

In the last case, the string MUST be delimited by double quotes ("), otherwise DOS will interpret it as redirection.

Examples of Valid String Targets:

mov

ax

"two words" (requires delimiter: contains a space)

'/7' (begins with non-alphanumeric)

"f->x" (contains ">", must use double quotes)

It is always OK to delimit a string, even if delimiters are unnecessary.

REMEMBER that if the target contains redirection characters (<, >, or |), it MUST be delimited with double quotes ("") or NT will try to perform unwanted redirection. For example:

FGREP "a <= b" myfile.pas

Hex byte sequences are used for binary file searching when the bytes to be searched for are non-displayable characters or make no sense as strings (e.g., program code). They are specified as pairs of hexadecimal bytes introduced by a leading '\$':

\$EF

\$CD21 (CDh, 21h)

\$CD\$21 (identical; either format is OK)

\$00FFFE00 (00h, FFh, FEh, 00h)

\$CD 21 (ILLEGAL: no spaces permitted)

You can combine strings and hex sequences by using a '+':

"abc"+\$E74A+"def"

Target WildCards

String targets (not hex targets) may contain one or more "?" wildcards. The ? will match any single non-null character in the file. E.g., "[?i]" will match "[si]", "[di]", etc., but not "[i]". Wildcards are not permitted when hex byte sequences are used.

If you want to search for the '?' character literally, use '\?'. For example, the target

```
what\?
```

will search for the literal string "what?".

Specifying target files

You can list zero (see "Redirection"), one, or multiple files to be searched. Files listed may include DOS's * and ? wildcards. Paths may be specified. Examples:

```
myfile.txt
```

```
*.txt
```

```
*.*
```

```
this.c that.c other.c
```

```
*.c *.pas
```

```
C:\UTIL\*.* D:\SYS\*.*
```

```
E:\LIBRARY\*.D?C
```

You may also specify just a drive or directory name. If you specify just a drive, FGREP searches all files in the current directory of the specified drive. If you specify a directory name, FGREP searches all files in the specified directory.

Examples:

```
c: [same as c: *.*]
```

```
c: d: [same as c: *.* d: *.*]
```

```
\src [same as \src *.*]
```

```
d:\src [same as d:\src *.*]
```

You can also search all subdirectories of the directories you specify; see the discussion of the -r option in the "Options" section below.

File Lists

If the name of a file on the command line is prefixed with an '@' character (e.g., '@list.txt'), the file is assumed to be a text file containing the names of files to be searched. For example:

```
fgrep hello @files.lst
```

FGREP will assume that the file FILES.LST is a text file that contains the names of files to be searched. Each line of such a file should contain the name(s) of one or more files to be searched. Files in file lists are specified exactly as are files named on the command line, except that you can't use another '@' file list; that is, file lists can't be nested.

Here is an example of a valid list file:

```
this.c  
  
c:\c\*.c d:\c\*.c  
  
d:\misc\*.txt
```

The name specified for the list file cannot contain wildcards; that is, this is illegal:

```
fgrep hello @lists.* (WRONG)
```

If you want to search for text in a file whose name begins with an '@', use a double '@'. For example,

```
fgrep hello @@foo.txt
```

will search for 'hello' in the file @FOO.TXT.

Redirection

If no file is listed, FGREP will take its input from the standard input device, allowing it to be used as a filter. For example, the command:

```
DIR | fgrep pas
```

would display any lines from a directory listing that contain the string "pas". Or,

```
DIR | fgrep "<dir>"
```

would list all subdirectories of the current directory.

This command:

```
pkunzip -c myzip foo.txt | FGREP somestring
```

would display all lines from the file FOO.TXT in the ZIP file MYZIP that contain "somestring" (the -c option causes PKUNZIP to extract FOO.TXT to the console device instead of to a disk file).

FGREP will terminate with an error if no file is listed and standard input is not redirected. Otherwise, it would be silently waiting for keyboard input, possibly leading you to believe that it had died.

Output

FGREP's default screen output looks like this:

```
**File <filename>
```

```
[text of lines containing string]
```

```
**File <filename>
```

```
[text of lines containing string]
```

You can add line numbers to the display by using the `-l` option (see below).

If the "Microsoft format" option (`-m` or `-M`, see below) is used, the output is in this format:

```
filename(linenum): text
```

This format is the standard format used by Microsoft[®] language products and by its MEGREP. If `-m` is used, only the filename and extension are displayed; if `-M` is used, the complete filespec, including path, is displayed. All useful output is sent to the standard output device, so it may be piped to other programs or redirected to file:

```
FGREP target filea | yourprog
```

```
FGREP target filea > test.txt
```

Error messages and the program logo will always appear on the console device, and will never appear in redirected or piped output (unless you use the `-Zl` option).

FGREP returns an errorlevel to the operating system. It will be one of:

0: String not found in any file

1: String found in at least one file

255: Error (file read error or bad parameter)

Limiting Searches to Specified Columns

The -i option specifies an input search field. You can use this if you are only interested in text that appears in certain columns of your files. The syntax of the option is:

`-i#[,#]`

where the first # is the starting column and the second is the ending column. The second # is optional; if it is not present, FGREP will only find your target if it begins in the specified starting column.

The first column of each line is column 1.

Examples:

```
fgrep -i20,30 stuff *.txt
```

Looks for the word "stuff" in text columns 20 through 30.

```
fgrep -i1 stuff *.txt
```

Looks for lines that begin with the word "stuff".

```
fgrep -i10 stuff *.txt
```

Looks for lines with the word "stuff" beginning at column 10.

In order for text to be "found," it must appear entirely within the search field.

Notes on FGREP

If you just want to know which files contain a string, use -0; it saves time because the rest of the file (after the first hit) is skipped. The combination -f0 is particularly efficient for this as it will simply display a list of files that contain the string.

There is a maximum line length of 500 characters if any of the -V, -W, -L, or -M switches are used; otherwise, the maximum line length is about 60K

FGREP expects standard text files.

Lines can be terminated by any of CR, LF, or CR+LF.

If output is redirected to disk, make sure there is enough space available. The program does not check.

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Christopher J. Dunford
The Cove Software Group
P.O. Box 1072
Columbia, Maryland 21044

(10/10/2012 - Internet link can still be found here:
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ls

Display contents of directory.

Filename: *ls.exe*

Usage

ls [-124acdefklnprtuxz] [*path1..pathn*]

Options

- 1 Display one entry per line.
- 2 Display two entries per line with size and date.
- 4 Display four entries per line with size.
- a Display hidden and system files.
- c Display files sorted down each column.
- d Display file totals and free disk space.

- e Sort files by extension.
 - f Display files only. No directories.
 - k No highlights or screen pauses.
 - l Display one entry per line with complete file information.
 - n Display output in lowercase.
 - p Put a backslash after each subdirectory.
 - r Reverse sort order.
 - t Sort files by time and date.
 - u Do not sort files.
 - x Display files sorted across screen.
 - z Sort files by size.
 - ? Display this screen.
-

mv

Move or rename files.

Filename: mv.exe

Synopsis

```
mv [ -fhi ] file1 file2
```

```
mv [ -fhi ] file ... directory
```

In the first form, if *file2* already exists, it is removed before *file1* is moved. If *file2* has a mode which prohibits writing (mv announces this fact and waits for standard input. If a y is entered then mv continues, otherwise mv exits.

In the second form, one or more files are moved to a specified directory. They keep their original file names.

Description

mv moves (renames) files. This is done either by changing the name of the entry, or by copying and deleting.

Options

-f Overrides any mode restrictions or the -i switch.

-h Display a short help message.

-i Specifies the interactive mode. When a move will supersede an existing file, mv -i prompts with the name of the file, followed by a question mark. If a line beginning with the letter y is entered, the move proceeds; any other reply prevents the move from occurring. The prompt may also be answered by redirecting a file containing the desired answer to the mv command, as in the following example:

```
C:> mv -i file1 file2 < file3
```

Also, if the -i option is used within a batch file, the prompt may be answered by echoing a response into mv, as in the following example:

```
C:> echo y | mv -i file1 file2
```

rm

Remove files or directories.

Filename: *rm.exe*

Synopsis

```
rm [ -fhiklv ] file ...
```

```
rm -r [ -fhiklv ] directory ... [ file ]
```

Description

rm removes one or more files from a directory.

If a file is marked read-only and the standard input is a terminal, the message "file: read-only ? " is printed. This is a prompt for confirmation. If the answer begins with y (for yes), the file is deleted, otherwise the file remains.

Note that if the standard input is not a terminal, the command will operate as if all answers are "yes".

Options

- f Remove all files (whether read-only or not) in a directory without prompting the user. Incompatible with -k.
- h Display a short help message.
- i Interactively confirm the removal of each file. Overrides the -f option and remains in effect even if the standard input is not a terminal.
- k Keep all read-only files without prompting the user. Incompatible with -f.
- l Do not delete directories when performing a recursive delete (-r).
- r Recursively remove any directories and subdirectories in the argument list. The directory will be emptied of files and removed. Note that the user is normally prompted for removal of any read-only files which the directory contains. The read-only files are removed without prompting if the -f option is used, or if the standard input is not a terminal and the -i option is not used. If the removal of a non-empty or read-only directory was attempted, the command will always fail (even if the -f option is used), resulting in an error message.
- v Verbose. Display the name of each file and directory as it is removed.

Diagnostics

All messages are generally self-explanatory.

It is forbidden to remove the files "." and ".." in order to avoid the consequences of inadvertently doing something like `rm -r .*`.

`rm` returns an exit code of 0 if all the specified files and/or directories are removed successfully. Returns a non-zero exit code if any errors occurred.

touch

Update the access and modification times of a file.

Filename: *touch.exe*

Synopsis

`touch [-acmh] [mmddhhmm [yy]] file ...`

Description

`touch` sets the access and modification times of each argument to the current time, or to a specific time if given. A file is created if it does not already exist.

Options

The `date-and-time` argument updates the modification time to that specified, rather than the current time. The first `mm` is the month, `dd` is the day of the month, `hh` is the hour, and the second `mm` is the minute. If `yy` is specified, it is the last two digits of the year. If omitted, the current year is assumed. Little error checking is performed; you can set very odd dates and times.

- a Update only the access time.
- c Do not create file if it does not exist.
- m Update only the modification time.
- h Display a short help message.

On FAT file systems access time and modification time are treated as the same thing; on HPFS and NTFS filesystems they are different.

Bugs

It is difficult to touch a file whose name consists entirely of digits, as `touch` will interpret the first such non-flag argument as a time. You must ensure that there is a character in the name which is not a digit, by specifying it as `./name` rather than `name`.

Command Apps for Microstation

CrashProcessKill

Function: This is a batch file that locates any processes related to Microstation and kills it. The program is useful when Microstation hangs or crashes. Since Microstation can load other applications the program attempts to kill those also. Process that are searched for killing are: Ustation.exe, geopak.exe, iplotorg.exe, draft.exe, xs.exe)

Filename: CrashProcessKill.bat

Usage : CrashProcessKill

Backup_User_Dgnlib

Usage: backup_user_dgnlib

Function: Backups or Restores a RWD Custom Interface file (user.dgnlib)

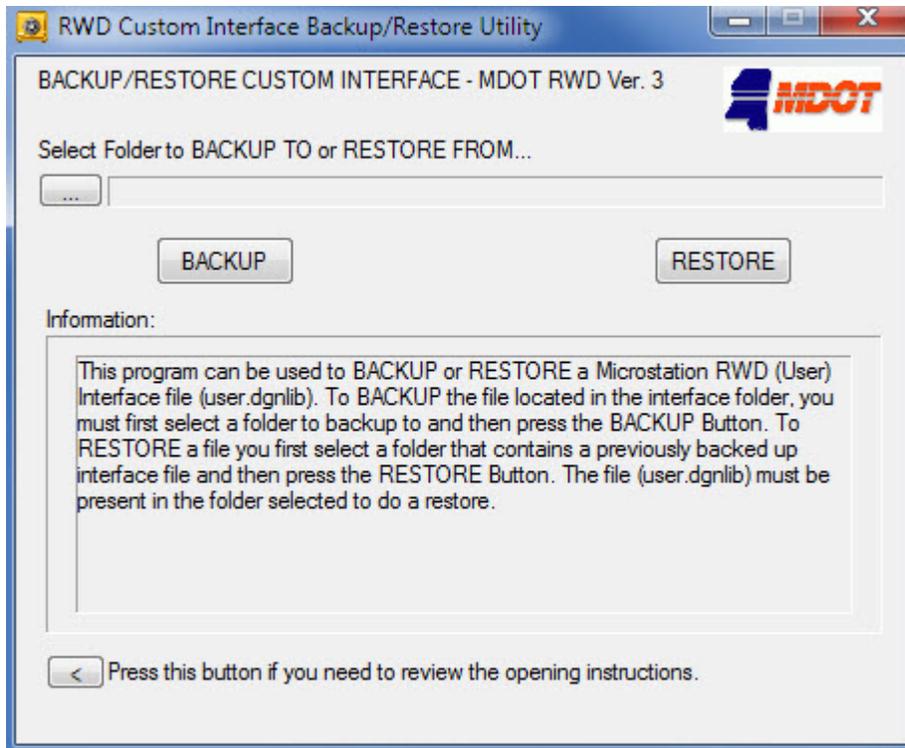
Note: the RWDDATA set must be loaded on the local computer and used by a single user in order for you to create a custom interface. Therefore this app is only useful when that requirement is met.

Filename: backup_user_dgnlib.exe

The application is used to either backup or restore a RWD Custom Interface file called "user.dgnlib". When the RWD Menu system is installed the RWD Custom Interface files are placed in the standard Interface folder. The interface file that is created for users to create their own interface menus is located in this folder. Since this is the required location for the file, it can and will get overwritten on all new installs. I have created a utility program that can be used to backup and/or restore this file.

Users are responsible for keeping a backup of their interface files. The program allows you to select a folder to back up the file by pressing the BACKUP button. Once backed up the user can then restore it anytime by using the RESTORE button.

The program has interactive help and instructions which are located in the lower portion of the dialog. If an error occurs the error message will appear in this location on the dialog. User the < button on to return to the initial instructions at any time. A link to run this application is located in the RWD APPS folder.



delgpkrc

Type in: **delgpkrc**

Function: Deletes ALL Geopak Resource files (*.rsc) located in the Geopak Resource Folder.

Filename: delgpkrc.exe

Although this command actually helps with Geopak rather than Microstation. This executable can look in the Geopak resource directory for resource files and delete them. It will delete ALL files that end with the extension .rsc. These resource files commonly get corrupted.

Users can find a shortcut to run this application from the RWD APPS desktop folder. It is also available while using Microstation. It can be found on the DZine menu under "File Utilities".

Geopak will save its resource files by default in the current users profile folder structure, but we have changed this location using a Microstation workspace variable. RWD has now set this location to point to the folder :

```
[drive]:\rwddata\workspace\prefs\gpkrc\
```

Note: The drive letter can vary depending on the installation location determined by the users.

newdgn

Filename: newdgn.exe

Version: 3.1

Function : This is a program executable for Microstation can be used to help you create design files that conform to the Roadway Design Standard naming convention.

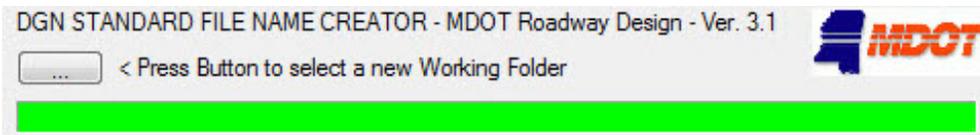
Usage: newdgn

The New DGN dialog appears when the application is started. The dialog lets you select a working directory to creating the dgn files in and then uses the fields to select the type of project design file, the coordinate zone (east or west) , the file dimension, and the fields that let you select the user defined portion of the name. Once they have been selected, you can preview the name and then create the design file.

The screenshot shows the 'Create Project DGNs' dialog box. The title bar reads 'Create Project DGNs'. The main title is 'DGN STANDARD FILE NAME CREATOR - MDOT Roadway Design - Ver. 3.1'. There is an MDOT logo in the top right. A folder selection button is followed by '< Press Button to select a new Working Folder'. Below this is a green bar. The dialog is divided into several sections: 'Select Type of Project Design File to Create:' with a dropdown menu showing 'Alignments - Hwy (Plotted from GPK)'; 'Select Zone:' with a dropdown menu showing 'East'; 'Dimension:' with a dropdown menu showing '2D'; 'Scale:' with a dropdown menu and a 'Clear' button; 'Chain Name:' with a text input field and a 'Clear' button; 'Suffix/Wk No./Etc.:' with a text input field, a '+1' button, and a 'Clear' button. At the bottom, there is a 'PREVIEW' button, a text input field, a 'Clear' button, and a 'Clear All' button. At the very bottom, there is a large blue 'CREATE DGN' button, a greyed-out text input field, and an 'OPEN' button.

Below are the basic steps and details instructions for each fields:

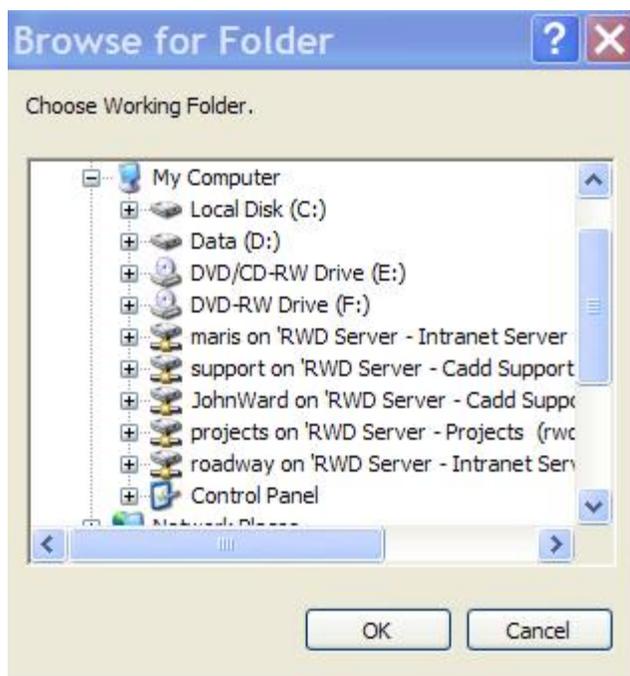
1. You must first select the **Working Directory to Create the DGNs**. This field is required before any other option can be selected. It will display the folder name selected after you use the selection button.



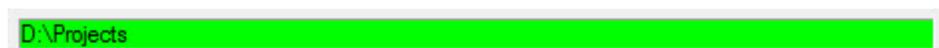
*** If the application is ran with no qualifiers then the user most select the working folder. If the command is ran with a directory name as a qualifier then the directory name will be automatically placed in the above field. If this application is ran from inside of Roadway Design's Microstation interface the current folder the design file resides is used as the directory qualifier. Therefore, the current working directory will always be inserted by default.

Qualifiers are entered on the command line as follows: newdgn c:\public, in the example c:\public is being used as the directory name qualifer. No error checking is done to make sure a valid directory name is entered. If an incorrect folder name is entered then dgn file will not be created.

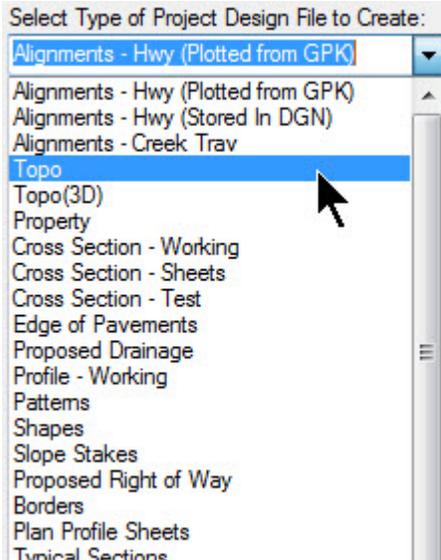
2. The selection button contains three dots [...]. This button will open a dialog to allow you to browse to a project folder name.



3. When the folder is selected the name will appear in the **Working Directory** Field. (See *** note under item 1.)



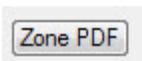
2. Select the Type of Project Design File to Create. This pulldown should contain every type of Roadway Design project design file that would be needed on any project. In this example I will select **Topo**.



3. Select the Survey Zone (East/West Zone) in the pulldown menu. For this example I will select **East**.



If you do not know the zone. You can use the "**Zone PDF**" button to view a county Map of Mississippi. Locate the county on the map and it will help your determine which coordinate zone the county is located in. (Due the the large size of the map, it will not be displayed here.)



4. Select or enter the required (**Dimension, Scale, Chain name, Suffix, and/or Separator**) for the file being created. These vary depending on the type of file being created. If the field is not applicable to the file type being create the field will be disable (ghosted). The following describes each field in order:

A. **Dimension:** Allows you to select 2D or 3D as the files dimension. Most files are created in 2D, but the program will allow you to create some files as 3D. If any file must be created in 3D it will be done automatically even when this field is set to 2D. This will insure that you are creating certain file types in the correct format.



B. The next field will let you select an **underscore** (if desired) to separate the standard part of the filename and the next field that may be used. This field is not required, but can make a file name easier to read. If the **blank** is selected, then no underscore or space is inserted. The **C** button below the field

will let you quickly clear the field. In this example I will select the underscore.



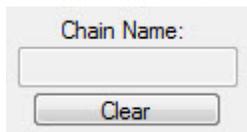
C. The **Scale** Field will allow you to enter or select a scale associated with the drawing being created, if the design file only has a single scale version, then you should leave this blank. If you plan to have several version of this dgn file at different scales then this field will let you select from a list of common scales that will be appended to the standard file name. You can enter your own scale if the one you need is not in the pull-down list. The **Clear** button below this field will let you quickly clear the field. In this example, I will select **20**, since I plan to have a **20** and **100** scale version of this design file.



D. The next field will let you select another **underscore** (if desired) to separate the previous part of the file name being constructed and the upcoming field. This field is really only needed if a chain name is supplied. This field is not required, but can make a file name easier to read. If the **blank** is selected, then no underscore or space is inserted. The **C** button below the field will let you quickly clear the field. In this example, I will leave it blank because I do not plan on entering a *Chain* name.



E. This next field will let you to append a **Chain Name** to the standard file name being constructed. If the file name does require a chain name it will be indicated in the Preview area of the dialog (this will be shown below). The field is initially blank and you may enter an appropriate chain name for this file. If the file type you have selected does not require a chain name, this field would be disabled when you press the Preview button. If you did happen to enter a name in the field and it is not allowed the field will be cleared when the Preview button is pressed. The **Clear** button below the field will let you quickly clear the field. .In this example, I will leave it blank.

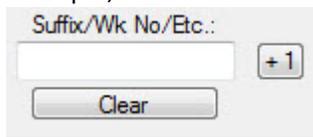


F. The next field will let you select another **underscore** (if desired) to separate the previous part of the file name being constructed and the upcoming field. The field is not required unless you have entered a scale, chain, or suffix, but can make the final file name easier to read. If the **blank** is selected, then no underscore or space is inserted. The **C** button below the field will let you quickly clear the field. I will leave it blank because I do not plan on entering anything in the next field.

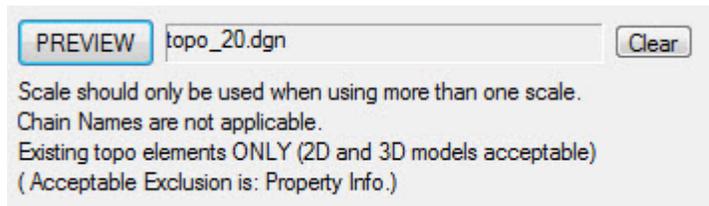


G. The **suffix...** field allows you to append other data to the filename. This field is initially blank and you may enter any suffix you like. Most dgn files do not require a suffix, but some files specifically need them, such as plan/profile sheet dgn's. The sheet numbered portion of the file name is considered the

suffix. You can enter a number; such as **3** and it will append to a previous part of a filename. If the field contains a number (no alpha character) you can automatically increase the number by one by pressing the **+1** button next to the field. The **Clear** button below the field will let you quickly clear the field. In my example, I will leave this field blank.

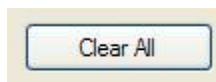


5. The next section describes the **PREVIEW** portion of the dialog. You can use the preview button any time during the steps **A through G** above to get a preview of what the file name will look like before actually creating the file. Different message will appear below the Preview button when it is pressed, the message depends on the file type being created. The message will contain some simple instructions that should be followed for the particular file name you are constructing. The Preview button also disables some of the fields that not appropriate to the file type being created and will not use any data that may already be in those fields.

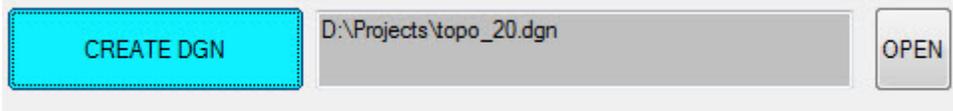


In this example, you see that the preview of the file name I generated is "**topo_20.dgn**". The area underneath the **Preview** button tells me that I should only use scales if I will have more that one scale. I plan on creating a 100 scale next, so the scale 20 portion (Item C above) in my file name is a valid entry. It also tells me that chain names are not applicable. I left those fields blank, but even if I had entered something in those fields they would have been cleared and disabled.. Notice that it tells me additional information about this file. If I were to decide I did not like the underscore symbol between my standard name and the scale, I could go back and select the field prior to the scale field and change it to a blank or just hit clear to set it back to nothing. Next to the Preview button and preview filename field is a **Clear** button which will clear the preview field file name. Remember that you can press the **PREVIEW** button at any time to get an updated preview of the file name to be created.

6. Located on the dialog box, to the far right of the Preview button and Preview field is a larger **CLEAR ALL** button. This button will allow you to quickly clear all the fields that are used to construct the file name as well as the preview field.

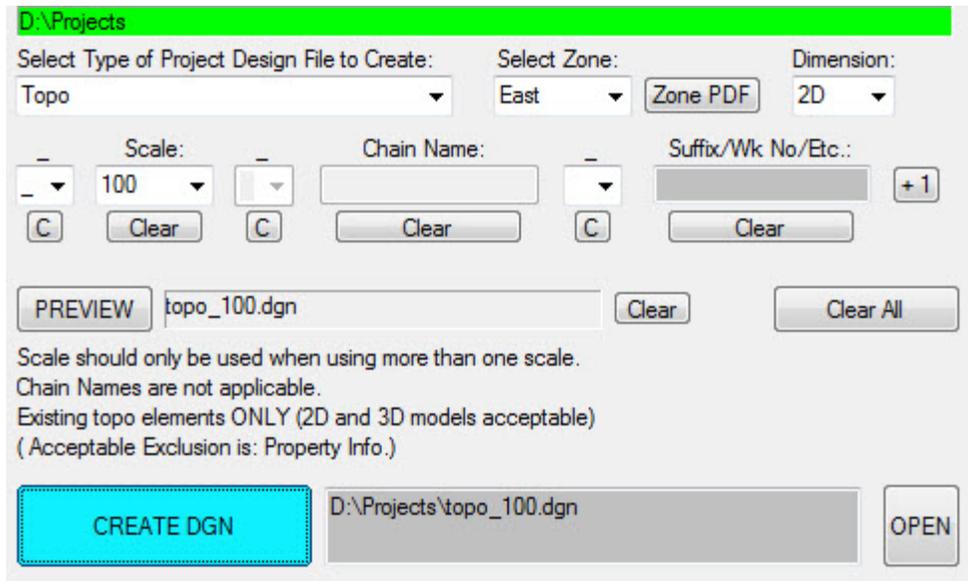


7. The bottom or final area of the dialog is actually for creating the design file using the file name you constructed in the upper section of the dialog. The file will be created in the working directory you specified, using the Roadway Standard seed files controlled by the East/West Zone and Dimension selected. Some files such as cross-section files do not require a zone, so the zone would be ignored. Files that are required to be in 3D format will ignore the Dimension setting. Once the **CREATE DGN** button is pressed the full path name and file name generated are displayed on the dialog as shown below.

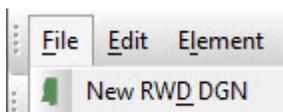


At this point you can then create more files, open the file or press the X in the upper-right corner of the dialog to close the application.

In this example, I also want to create a 100 scale version of my topo dgn file. Using the steps above I will construct another file name and create the dgn as shown below.



8. This application can be assessed from within Microstation from the FILE pulldown and the RWD DZine Menus File Utilities section.



When using the application from within Microstation, the directory the current design files is located in is automatically selected as the working folder for the application.

The application can be outside of Microstation from the RWD APPS folder on your desktop.



Interface_Update

Function : This is a program executable for Microstation so users can be used to update the RWD Custom Workspace Interface files into the RWD Interface folder.

Filename: Interface_Update.exe

Interface files are design file libraries (.dgnlib) that contain the RWD Custom tools. These files must be located in the workspace interface folders that are assigned to Microstation. Template dgn libraries can be located in the RWDDATA set folder. This program copies them to the appropriate Microstation Workspace Interface folder.

Note: This program will not copy the "user.dgnlib" file. This file could contain a users custom files and it does not need to be updated. If you are performing a new install you should use the program "rwddata_config.exe", shown below.

Usage: Interface_Update

newupf

Function : This is a program executable that Microstation users can use to replace corrupted Microstation workspace preference files with Roadways default template preference files.

Filename: newupf.exe

The program locates template preference files in the RWDDATA set and copies these to the required Microstation Preference folder. RWD's preference folder is located differently than the default Microstation locations and are defined by Microstation environment variables. The location can vary based on the installation performed by the user.

Usage: newupf

newupfSS

Function : This is a program executable that Microstation users can use to replace corrupted Microstation workspace preference files with Roadways default template preference files.

Filename: newupfss.exe

See "newupf" for an overall description of what this file does. It differs in that it creates the RWD preferences that work on a single screen workstation or laptop.

Usage: newupfss

rwddata_config

Function: This is an executable that will copy ALL the specialized template Roadway Design Microstation workspace files to the required directories under Microstation. This exe saves you the time that it would take to manually copy all the workspace files to various Microstation workspace folders.

Filename: rwddata_config.exe

The workspace consists of several different types of files...

Project configuration files (.pcf) and user configuration files (.ucf) contain variables that point to data folders in Microstation.

Preference files (.upf and .xml) that define what settings are on and off in Microstation along with which menus are open and where they are docked.

Interface files (.dgnlib) are design file libraries that contain custom menus and other design file specific items.

The program will create folders if needed to put these workspace files. It will also overwrite any of these files if they already exist.

Usage : RWDDATA_CONFIG

PCF_Updater

Function: This is an executable that will copy ALL the specialized project Roadway Design Microstation workspace configuration files (.pcf) to the required workspace directories for Microstation

Filename: pcf_updater.exe

Project configuration files (.pcf) and user configuration files (.ucf) contain variables that point to data folders in Microstation. These files must be located in the workspace project level folders. This program can copy the template versions of the files and place them into their proper folder locations.

Usage : PCF_Updater

SetMstDefWrkSpace

IMPORTANT: This application will only function if the user has administrator rights.

Function: This is an executable program that will set the Operating System's default Microstation Open .dgn command to use a set workspace configuration name. It fixes the system so that when you double click on a .dgn file in Windows Explorer or from EMail attachments it will open in the selected RWD workspace configuration.

The program is basically a RWD workspace configuration selector for the default file open commands for .dgn's used by the operating system. Most people do not know how to modify the system to force Microstation to use a certain workspace when a .dgn file is selected other than with a pre-defined shortcut icon. This program makes it easy to select either the east, west, metric workspaces as the default. It will even let you set it back to the standard settings.

When the program dialog appears, all you have to do is select the RWD workspace configuration type and press the GO button. The workspace configuration selected will then automatically become the one that will be used by the operation system when you start Microstation by clicking on a .dgn file name in other applications other than from a pre-set icon.



Filename: setmstdefwrkspace.exe

Usage : setmstdefwrkspace

Note: A shortcut icon for this program is located in the RWD APPS desktop folder. Since this program will only work if Microstation is installed in the default folders on the C drive, another program called

(setmstdefwrkspaced.exe) is available if Microstation is installed on the D drive. No shortcut is available, so go to C:\rwd\apps to run the application.

updaxi

Function: This is a batch file that will copy the Axiom Application Configuration file to the proper directories under Microstation. This configuration file is only used when Axiom products are installed.

Filename: updaxi.bat

Usage : updaxi

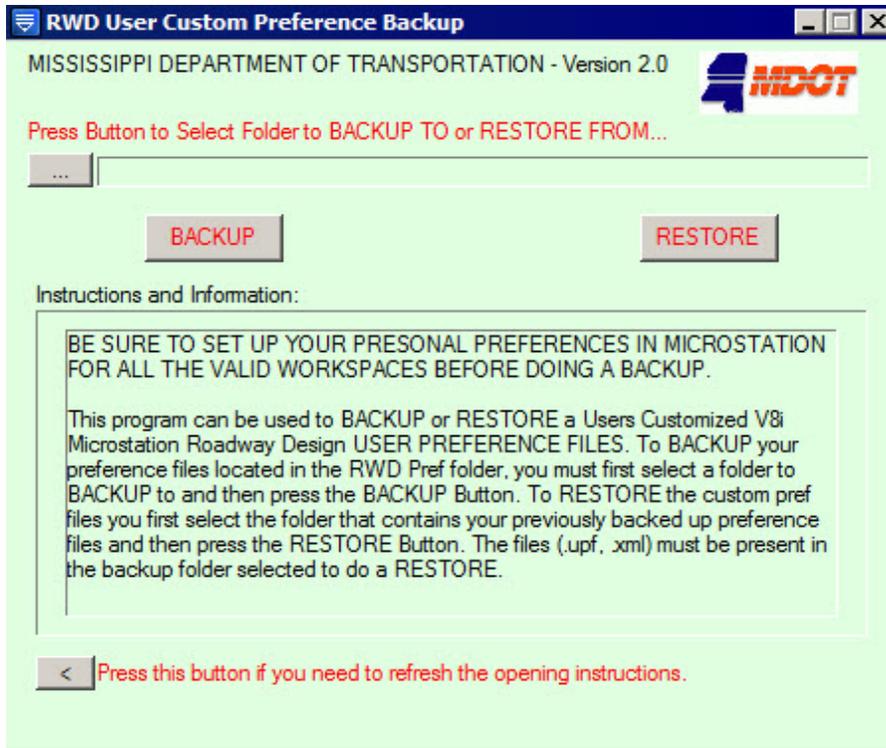
UserPrefBackup

Function: This application executable will make it possible for individuals users to make backups of their customized preference in Microstation. Thus allowing them to restore the preferences to their liking instead of having to use RWD's custom settings. Useful when the preference files get corrupted and have to be repaired.

The application is used to either backup or restore a RWD User defined Interface files. When the RWD Menus system is installed the RWD Preference files are placed in the standard RWD Preference folder. These standard interface files always get modified by the user, but are never backed up by default. Once a user has the preferences set to their liking, this program will help them back them up and restore them later. Thus, keeping them from having to restore RWD's preferences and resetting everything again.

Users are responsible for keeping a backup of their preference files. The program allows you to select a folder to back up the file by pressing the BACKUP button. Once backed up the user can then restore it anytime by using the RESTORE button. User must remember the folder location used.

The program has interactive help and instructions which are located in the lower portion of the dialog. If an error occurs the error message will appear in this location on the dialog. User the < button on to return to the initial instructions at any time. A link to run this application is located in the RWD APPS desktop folder.



Filename: UserPrefBackup.exe

Usage : userprefbackup

InstallTrafficWorkspace

Function : This program installs a Roadway Design's version of Traffic Divisions workspace.

Filename: InstallTrafficWorkspace.exe

This program will install Roadway Design's version of Traffic Divisions workspace configuration. It copies the source workspace and preference files from the RWD data set template directory structure and places the new workspaces in the RWD data set workspace folders. The user will have to manually select the user workspace (RWDTraffic) in the Microstation Manager Dialog because no shortcut icons have been made to load this workspace. The primary purpose of this workspace is to point to the Traffic font resource files for plotting purposes.

Usage: InstallTrafficWorkspace

Create_Apps_Icons

Function : This program can generate shortcut icons in the folder ...\\rwd\\data_rwd_apps_

Filename: Create_Apps_Icons.exe

This program can read the contents of c:\\rwd\\data.ini to determine the location of the RWD data set folder ...\\rwd\\data\\apps. It will then use that information to generate shortcut icons in the folder ...\\rwd\\data_rwd_apps_. This applications is primarily used during the setup process of the RWD dataset and workspace (See Setup.exe).

The setup process can then copy this folder to the common desktop folder on the computer.

Usage: Create_Apps_Icons

Create_Project_Icons

Function : This program can generate shortcut icons in the folder called _PROJECTS_ on the desktop

Filename: Create_Project_Icons.exe

This program can read the contents of c:\\rwd\\data.ini to determine the location Microstation and the RWD data set folders. It will then use that information to generate shortcut icons in the folder _PROJECTS_ located on the desktop. This applications is primarily used during the setup process of the RWD dataset and workspace (See Setup.exe). The application can be ran from within the _PROJECTS_ folder on the desktop after it has been placed on there by the setup process. It can be used at anytime if the icons need to be regenerated.

Usage: Create_Project_Icons

Remove_C_RWD

Function : This program is designed to remove or delete older Roadway Design data sets located under the folder C:\\RWD

Filename: Remove_C_RWD.exe

Many of the previous Roadway Design Data sets were located under the folder C:\\RWD. Most version dating up to 2011 used this directory structure for the Microstation dataset. This program can be used to remove this folder and some other data that may be related to this dataset.

Usage: Remove_C_RWD

Quantity Programs

Roadway Design requires that Summary of Quantities (SQS) sheets created in design files to be created first in EXCEL. We provided excel files (.xslm) in the group folders that can be used for this purpose.

[Click here to go directly to the SQS instructions.](#)

Also, In the rwwdata/apps/QuanPrograms directory are quantity calculation programs. Some program are written in QBASIC and other are written in a scripting program call Autolt.

There a few prerequisites to running these programs. Most of the original programs were written in QBasic and were originally designed to print the results directly to a printer that was physically attached to your computer. They have since been re-written to print the results to a "hard-coded" directory and filename. This directory is call "Q" and is located on C: drive. (This folder is usually created during the install and setup of the RWD data set.)

All text files ".txt" that will be created by the QBasic programs go into this directory. Once created you should move them to the project directory that it relates too. Each time these programs are run, it only creates one version of its text file. If any subsequent files are created in the Q directory, they can overwrite a file with the same name that already exist there. So if you don't move it, you lose it.

Currently the programs are located in the sub-directory called "...RWDDATA\APPS\QuanPrograms"

BRIDGEENDPAVE.EXE - Bridge End Pavement Calculator

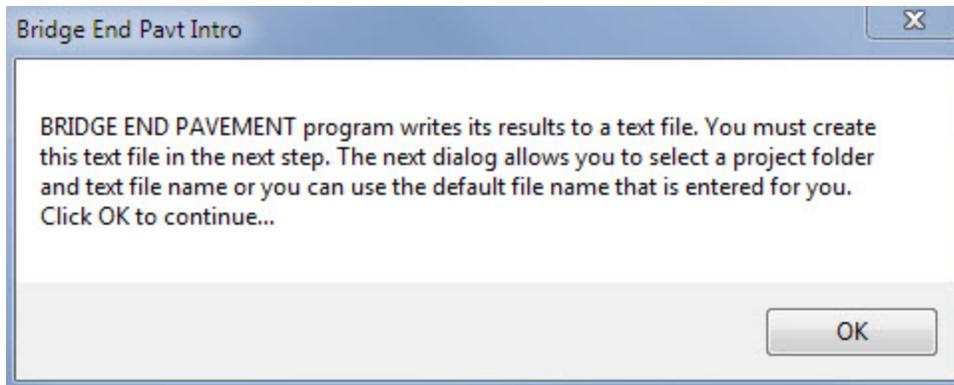
Program calculates the square yard of concrete for bridge end pavement, the linear feet of expansion joint, and the square yards of transverse grooving.

Input Required:

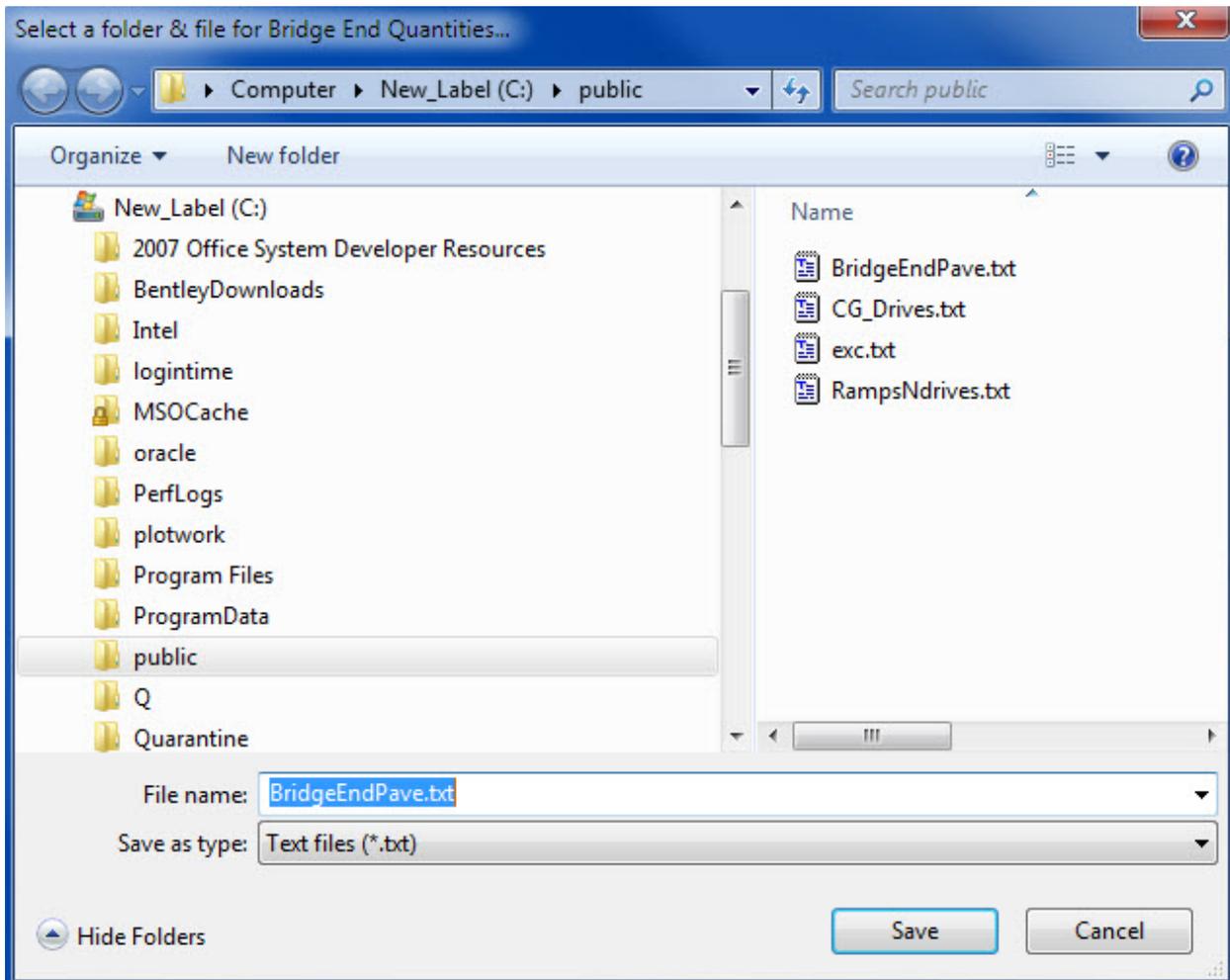
1. Br. Abut. Station (Optional, but recommended)
2. W1 (feet) (Required)
3. W2 (feet) (Required)
4. Skew (Z)(degrees in decimal format)(Optional)
5. Rail Height (inches) (Optional, set to zero by default)

Location of W1, W2, and Z can be found on the RWD Standard Drawings. Rail Height will be 0, 32 or 42 inches to match the rail height along the roadway.

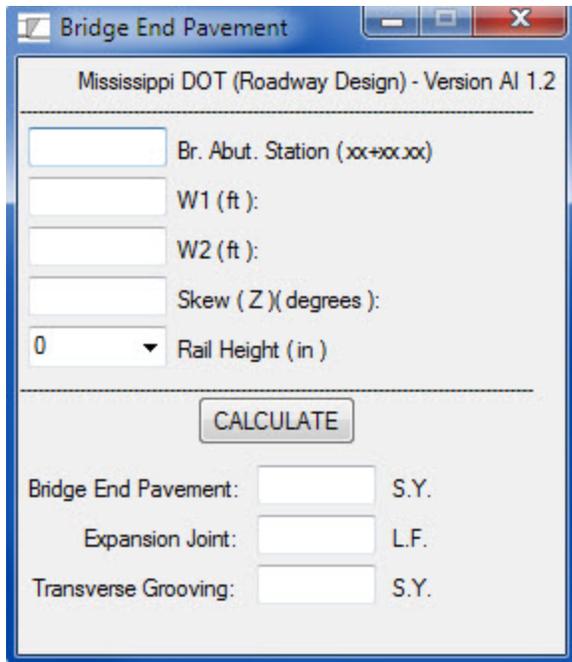
The program writes program results to a text file which must be established by the user. User must select a project folder and file name at the beginning of the program. This information is shown to the user at the beginning of the program in a message box...



After OK is selected, a dialog appears to allow selection and entry of a file name to save data. User should navigate to a project folder in the dialog. A default filename is entered in the "File Name" field. The user can take the default name or enter a new name. Press the SAVE button to create the file, if the file already exist in the folder you are prompted to overwrite or you can cancel to change the file name and Save again.



One you have created the file the primary calculation dialog appears as follows:



Output will be displayed in the lower portion of the dialog for each run when the CALCULATE button is pressed. All runs are stored in the defined folder and ascii file name (default file name: BridgeEndPave.txt). Below is a sample of output generated.

ESTIMATED BRIDGE END PAVEMENT QUANTITIES - 06/11/2008

```

-----
STATION: 12+00
W1      W2      WB      W      A      B      Z
-----
22      22      44      45      20      20      0
Bridge End Pavement... = 100 S.Y.
Expansion Joint..... = 45 L.F.
Transverse Grooving... = 100 S.Y.
32 in. Rail..... = 0 L.F.
42 in. Rail..... = 0 L.F.

STATION: 12+50
W1      W2      WB      W      A      B      Z
-----
22      22      44 46.83 20      20      0
Bridge End Pavement... = 102.04 S.Y.
Expansion Joint..... = 46.83 L.F.
Transverse Grooving... = 98.89 S.Y.
32 in. Rail..... = 20 L.F.
42 in. Rail..... = 0 L.F.

-----
TOTALS FOR BRIDGE END PAVEMENT... = 202.04 S.Y.
TOTALS FOR EXPANSION JOINT..... = 91.83 L.F.

```

TOTALS FOR TRANSVERSE GROOVING... = 198.89 S.Y.
TOTALS FOR 32 in. RAIL..... = 20 L.F.
TOTALS FOR 42 in. RAIL..... = 0 L.F.

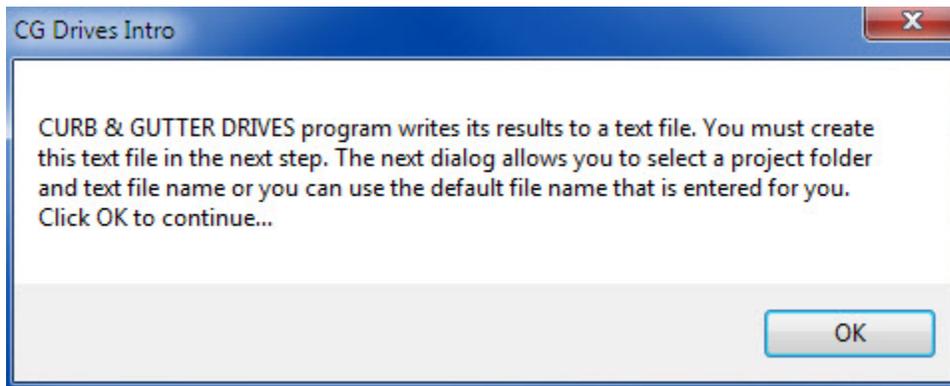
CG_Drives.exe - Urban Curb and Gutter Drives

Program is designed to calculate quantities for urban drives. Items calculated are driveways area in S.Y., and the amounts of Surface and Binder Mix in Tons. Quantities calculated assume that the extra area will be paved:

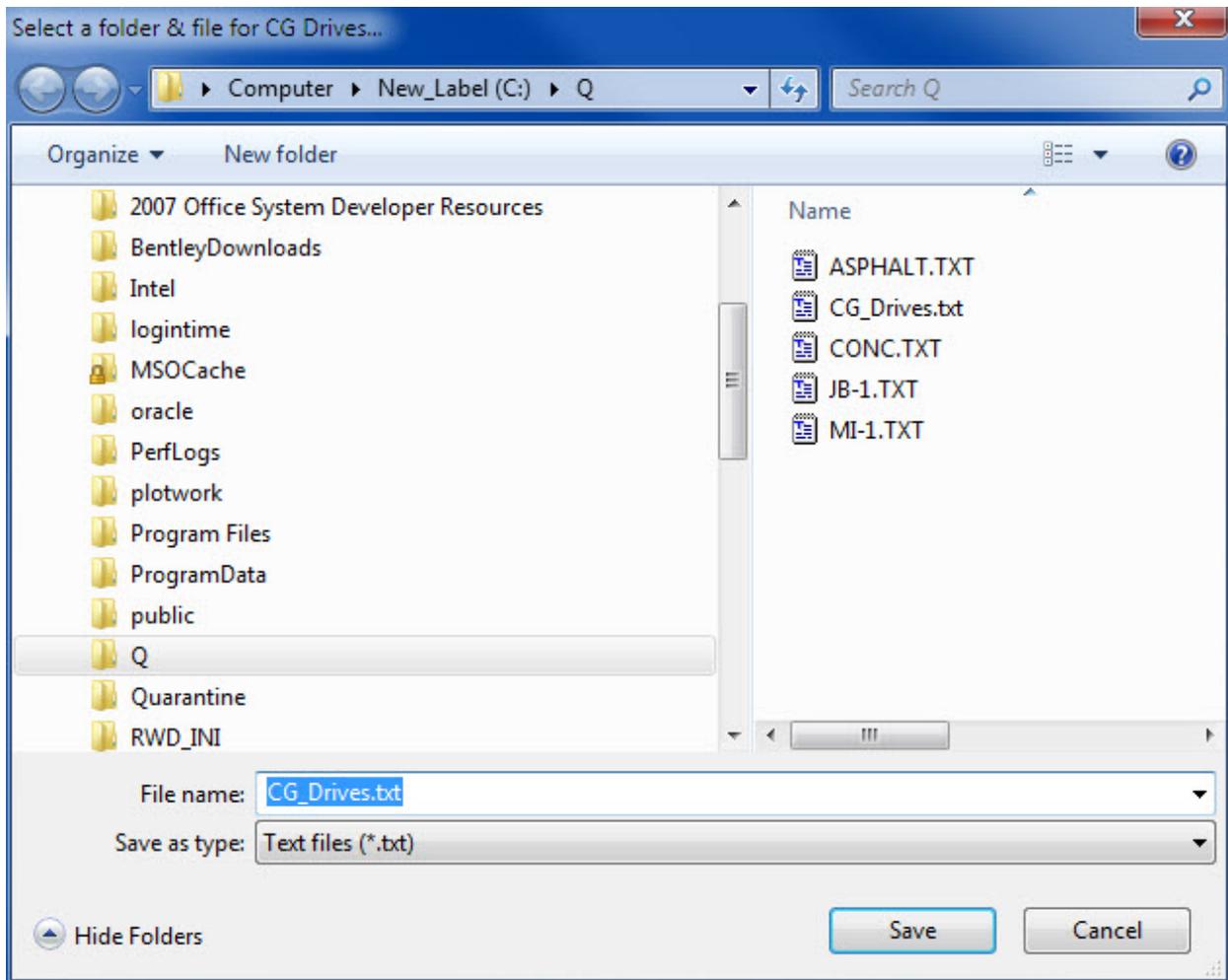
Input Items required:

1. Station
2. Side (Left or Right)
3. Driveway width in feet.
4. Curb and Gutter width in feet.
5. Length of Extra Area in feet.
6. Radius to the Back of Curb in feet.
7. Depth of Granular Material in inches (defaults to 6 inches)

The program writes program results to a text file which must be established by the user. User must select a project folder and file name at the beginning of the program. This information is shown to the user at the beginning of the program in a message box...



After OK is selected, a dialog appears to allow selection and entry of a file name to save data. User should navigate to a project folder in the dialog. A default filename is entered in the "File Name" field. The user can take the default name or enter a new name. Press the SAVE button to create the file, if the file already exist in the folder you are prompted to overwrite or you can cancel to change the file name and Save again.



Once you have created the file the primary calculation dialog appears as follows:

Curb & Gutter Driveways

Mississippi DOT (Roadway Design) - Version 1.1

10+00 Drive Station (xx+xx):

LEFT Choose Side - Left or Right

25 Driveway Width in (ft):

2 Curb and Gutter Width in (ft):

10 Length of Extra Area in (ft):

10 Radius to Back of Curb (ft):

6 Depth of Granular Material (in):

CALCULATE

DRIVE WIDTH: 25 FT.

C AND G WIDTH: 2 FT.

EXTRA AREA: 10 FT.

RADIUS LENGTH: 10 FT.

DRIVEWAY AREA: 42.55 S.Y.

SURFACE MIX: 2.29 TON

BINDER MIX: 2.29 TON

GRAN. MATL: 11.72 C.Y. 6 IN.

Quantities calculated assume that the extra area will be paved.

Output will be displayed in the lower portion of the dialog for each run when the CALCULATE button is press. All runs are stored in the defined folder and ascii file name set by the user (the default file name: CG_Drives.txt). Below is a sample of output generated.

ESTIMATED CURB AND GUTTER DRIVEWAY QUANTITIES - 10/17/2011

Quantities calculated assume that the extra area will be paved.

STATION NO: 10+00 (LEFT)

25 (FT)	DRIVEWAY WIDTH
10 (FT)	EXTRA AREA LENGTH
2 (FT)	C & G WIDTH
10 (FT)	RADIUS LENGTH
42.55 (SY)	DRIVEWAY AREA
2.29 (TON)	SURFACE MIX
2.29 (TON)	BINDER MIX
6 (IN)	DEPTH OF GRAN. MATRL.
11.72 (CY)	GRANULAR MATERIAL

CURVEDATA.EXE - Curve Data Calculation

Although this program does not calculate quantities, it can help you calculate curve data info.

Input Required: Any two the following:

1. Delta of Curve (Decimals)
2. Degree of Curve (Decimals)
3. Tangent Length (Feet)
4. Length of Curve (Feet)
5. Radius of Curve (Feet)

Mississippi DOT (Roadway Design) - Version 1

ENTER TWO KNOWN VALUES:

Delta (dec.):

Degree (dec.):

Tangent Length (ft.)

Length of Curve (ft.)

Radius Length (ft.)

DELTA	50.347049
DEGREE	11.459156
TANGENT	235
LENGTH	439.3608836
RADIUS	500

Output will be displayed in the lower portion of the dialog. No ASCII text file will be generated.

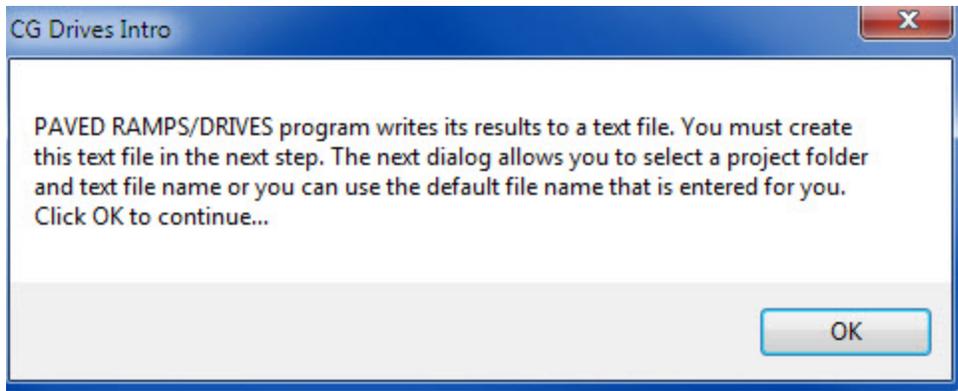
RampNDrives.EXE - Rural Paved Driveway and Ramp Quantities

Program is designed to calculate quantities for rural driveways and ramps. Items calculated are the paved apron in s.y., the granular material in c.y, and the surface and binders mix in tons. The quantities assume that only the apron will be paved and that the depth of granular material is 6 inches:

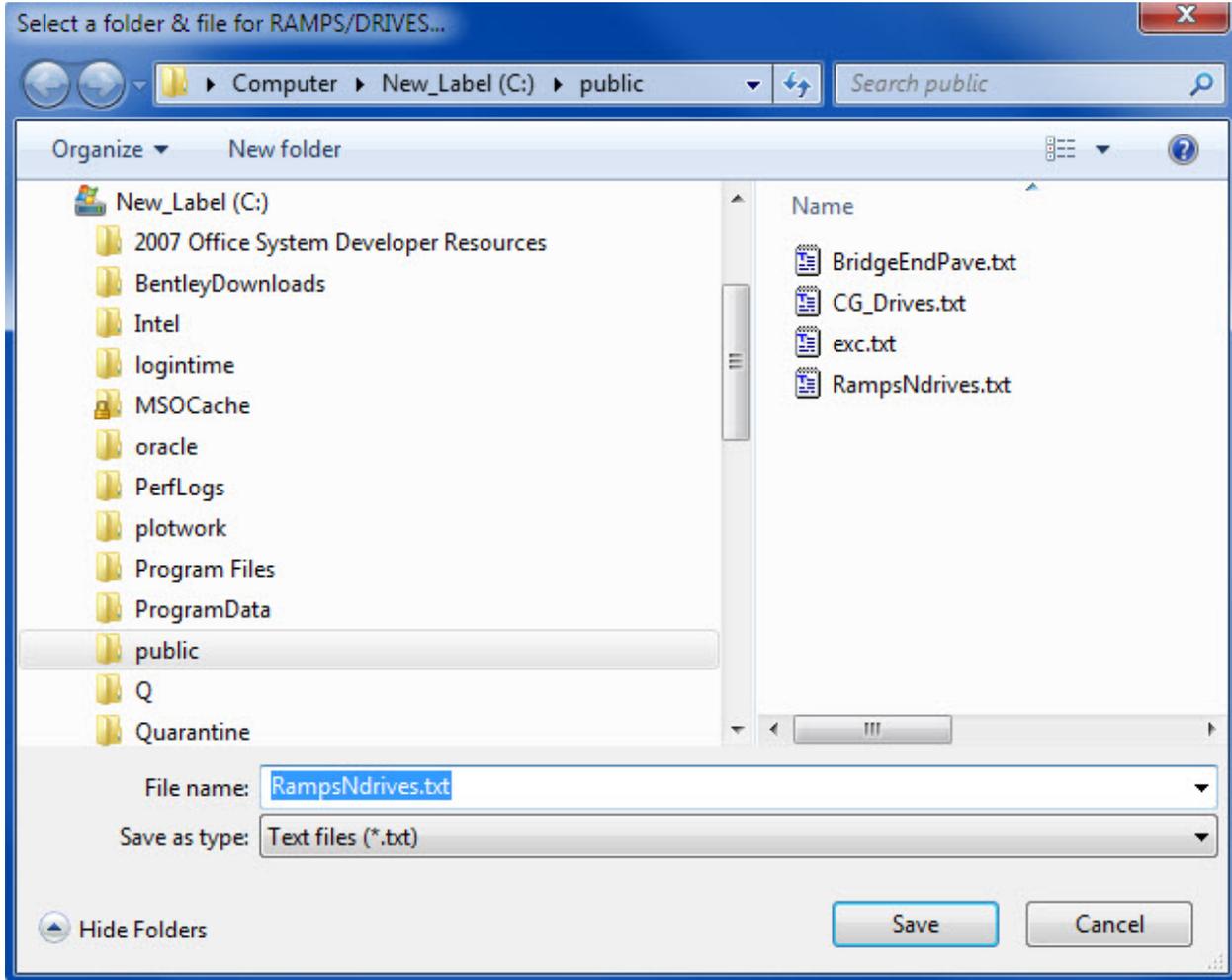
Input Items required:

1. Station
2. Side (Left or Right)
3. Driveway width in feet.
4. Roadway Shoulder width in feet.
5. Length of Extra Area in feet.

The program writes program results to a text file which must be established by the user. User must select a project folder and file name at the beginning of the program. This information is shown to the user at the beginning of the program in a message box...



After OK is selected, a dialog appears to allow selection and entry of a file name to save data. User should navigate to a project folder in the dialog. A default filename is entered in the "File Name" field. The user can take the default name or enter a new name. Press the SAVE button to create the file, if the file already exist in the folder you are prompted to overwrite or you can cancel to change the file name and Save again.



One you have created the file the primary calculation dialog appears as follows:

Paved Ramps and Drivewa... [-] [Max] [X]

Mississippi DOT (Roadway Design) - Version 2.1

10+00 Drive Station (xx+xx):

LEFT Choose Side - Left or Right

30 Driveway Width in (ft):

8 Roadway Shoulder Width in (ft):

15 Length of Extra Area in (ft):

CALCULATE

DRIVE WIDTH: 30 FT.

SHLDR WIDTH: 8 FT.

EXTRA AREA: 15 FT. 50 S.Y.

PAVED APRON: 38.98 S.Y.

EX. GRAN. MATL: 8.33 C.Y.

SURFACE MIX: 3.22 TON

BINDER MIX: 3.22 TON

Quantities calculated assume that only the apron will be paved and that the depth of Gran. Material is 6 inches.

Ou

Output will be displayed in the lower portion of the dialog for each run when the CALCULATE button is pressed. All runs are stored in the defined folder and ascii file name set by the user (the default file name: rampsNdrives.txt). Below is a sample of output generated.

ESTIMATED PAVED RAMP AND DRIVEWAY QUANTITIES - 10/17/2011

Quantities calculated assume that only the apron will be paved and that the depth of Granular Material is 6 inches.

STATION NO: 10+00 (RIGHT)

30 (FT)	DRIVEWAY WIDTH
8 (FT)	SHOULDER WIDTH
15 (FT)	EXTRA AREA LENGTH
8.33 (CY)	EXTRA AREA GRANULAR MATERIAL
50 (SY)	EXTRA AREA
38.98 (SY)	PAVED APRON
3.22 (TON)	SURFACE MIX
3.22 (TON)	BINDER MIX

STATION NO: 12+00 (RIGHT)

25 (FT)	DRIVEWAY WIDTH
8 (FT)	SHOULDER WIDTH
12 (FT)	EXTRA AREA LENGTH
5.56 (CY)	EXTRA AREA GRANULAR MATERIAL
33.33 (SY)	EXTRA AREA
34.54 (SY)	PAVED APRON
2.85 (TON)	SURFACE MIX
2.85 (TON)	BINDER MIX

=====

TOTALS : PAVED APRON = 73.52 (SY)
TOTALS : GRANL MATRL = 13.89 (CY)
TOTALS : SURFACE MIX = 6.07 (TON)
TOTALS : BINDER MIX = 6.07 (TON)

=====

FILTERMAT.EXE - FILTER MATERIAL

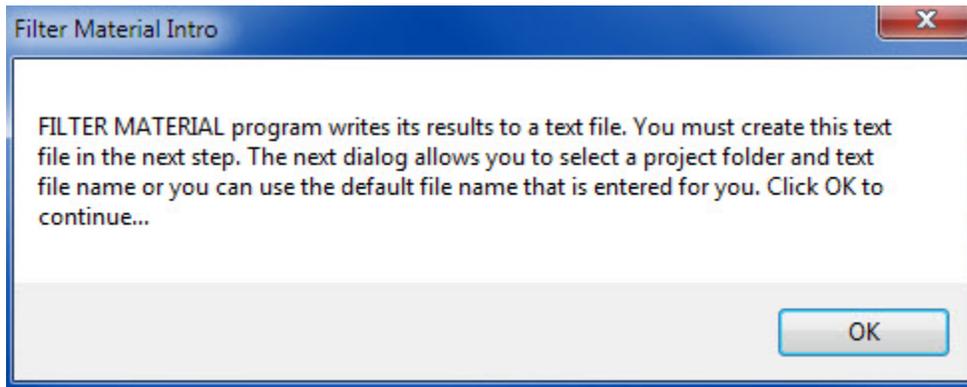
Program is designed to calculate filter fabric, Type A material and Type B material needed for any length or size of storm drain used for subsurface drainage. The results of the calculations are written to a user defined text file that is selected when the application starts:

Input Items are:

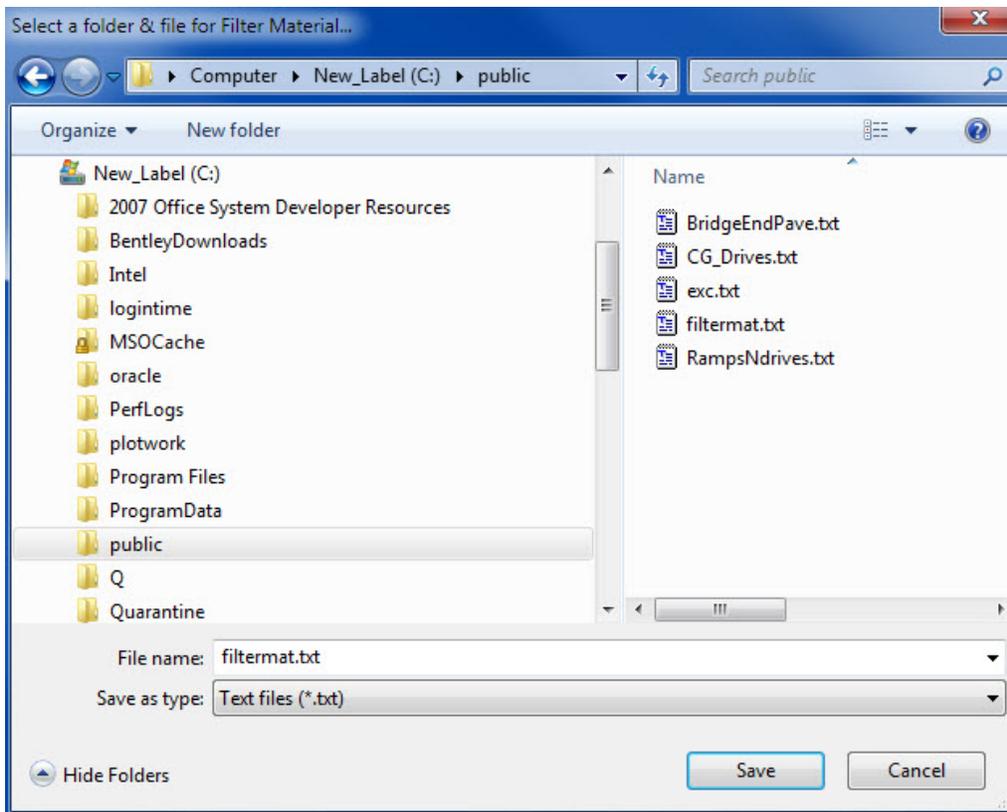
1. Pipe Station (optional)
2. Length of Pipe in Ft.

- 3. Pipe Size in Inches (Selectable)
- 4. Difference in Flowline and Subgrade in Ft.

The program writes program results to a text file which must be established by the user. User must select a project folder and file name at the beginning of the program. This information is shown to the user at the beginning of the program in a message box...



After OK is selected, a dialog appears to allow selection and entry of a file name to save data. User should navigate to a project folder in the dialog. A default filename is entered in the "File Name" field. The user can take the default name or enter a new name. Press the SAVE button to create the file, if the file already exist in the folder you are prompted to overwrite or you can cancel to change the file name and Save again.



Once you have created the file the primary calculation dialog appears as follows:

Mississippi DOT (Roadway Design) - Version 1.1

1+00 Pipe Station (xx+xx):
50 Length Of Pipe (ft):
36 Pipe Size(in):
3 Difference - Flowline and Subgrade (ft):

CALCULATE

Type A Material: 7.45 C.Y.
Type B Material: 0 C.Y.
Filter Fabric: 84.55 S.Y.

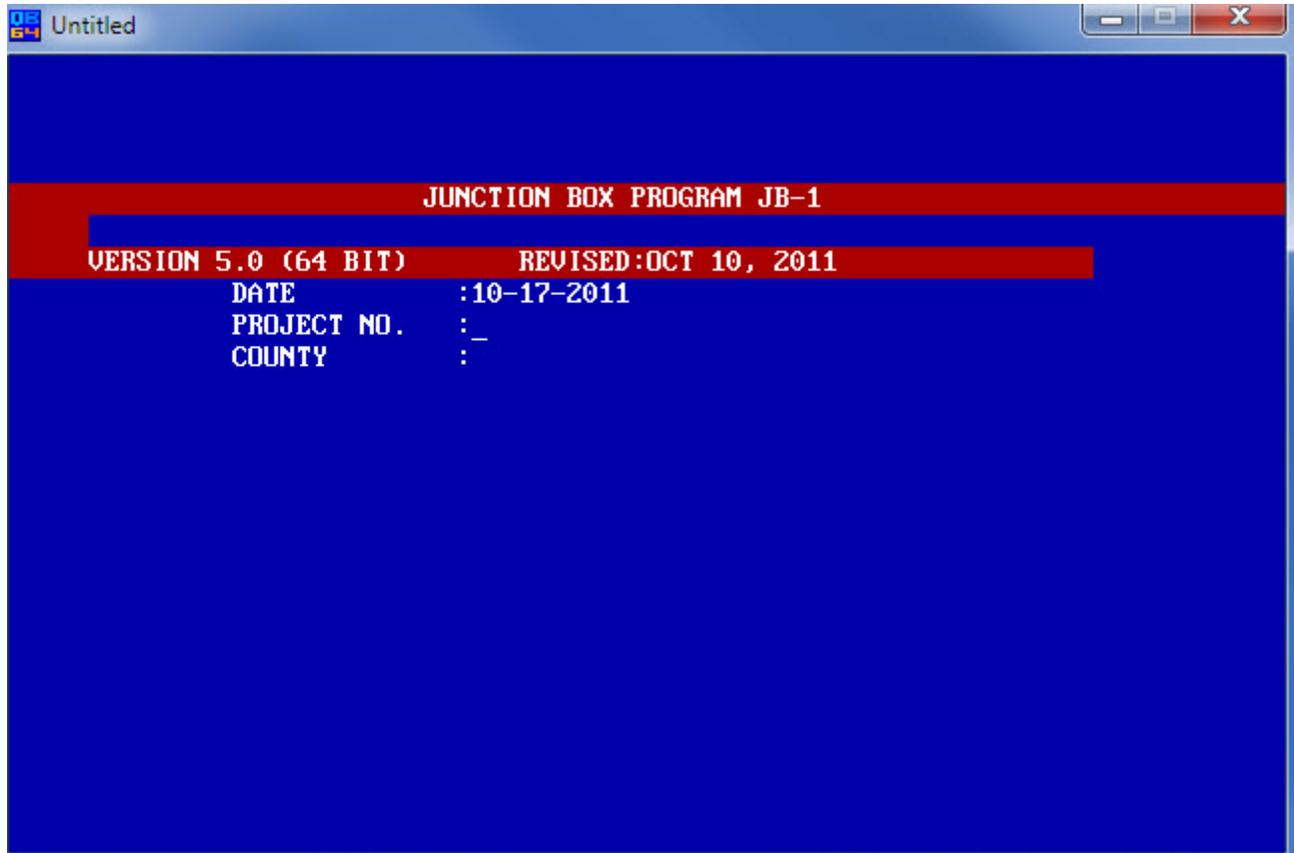
Once input is given the user presses the CALCULATE button to display the results of the calculation. If an invalid input is given the application will display the reason for the error. In addition, valid calculations and totals are written to a user selected text file (default = filtermat.txt). When exiting the application the output text file is displayed in notepad to allow viewing, editing, or printing.

Example Output:

```
filtermat.txt - Notepad
File Edit Format View Help
ESTIMATED FILTER MATERIAL QUANTITIES - 04/11/2007
-----
STA. 1+00      L=50      DIA./SPAN=36  DIFF(FT):3
Type A: 7.45 C.Y.      Type B: 0 C.Y.      Fabric: 84.55 S.Y.
STA. 2+00      L=40      DIA./SPAN=60  DIFF(FT):1
Type A: 10.56 C.Y.     Type B: 0 C.Y.     Fabric: 96.16 S.Y.
-----
TOTAL FOR TYPE A MATERIAL IS: 18.01 C.Y.
TOTAL FOR TYPE B MATERIAL IS: 0 C.Y.
TOTAL FOR FILTER FABRIC IS: 180.71 S.Y.
```

JB-1(64).EXE - Junction Box Quantities

This program calculates the Concrete and Steel quantities for a JB-1 Junction Box. When the program starts you are asked to enter the Project Number and County (These are optional)



Enter Dimensions in Inches when Requested (Side 1 will always be the outflow side).

Inputs Required are: JB Number, Station, Side of Roadway (L or R), Sides 1, 2, 3, and 4 Pipe Spans, Rises, Skews Angles, and Height (if not Minimum).

```
C:\ JB-1.EXE
ENTER DIMENSIONS IN INCHES WHEN REQUESTED
SIDE 1 WILL ALWAYS BE THE OUTFLOW SIDE.

JB NO. 1          SIDE 4
STA. NO. 12+00    PIPE SPAN <IN.>  : 0
                  PIPE RISE <IN.>  : 0
                  SKEW ANGLE       : 0
SIDE <L OR R> L   PIPE THICKNESS  : 0

SPAN    RISE    SKEW    THICKNESS
18      0       15      0
0       0       0       0
18      18      0       2.5
0       0       0       0

PLEASE CHECK ALL ENTRIES
ARE ALL ENTRIES CORRECT <Y OR N>?
```

As you enter each sides information the result will be displayed below the input area. It allows you to check your entries and correct them if needed.

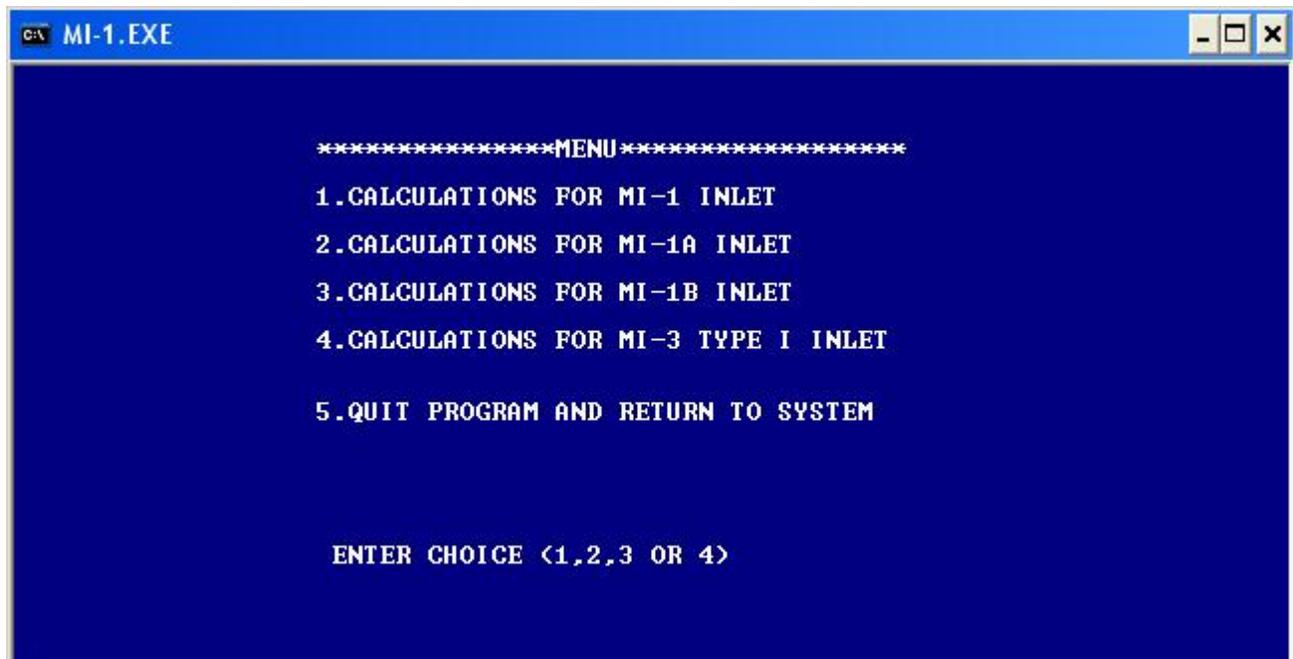
Next it will prompt if you will base calculations on minimum height.

```
C:\ JB-1.EXE
THIS PROGRAM WILL BASE ALL CALCULATIONS ON MINIMUM HEIGHT
MINIMUM HEIGHT FOR THIS JUNCTION BOX IS 2.916667
IS THIS THE CORRECT HEIGHT ? <Y/N> _
```

Next the calculation are displayed and you can then calculate the another JB-1. If finished it will prompt to save data to the Q directory.



Menu Choice are based on Median Inlet Types, Select menu choices 1 to 4 for inlet types as shown below, enter 5 to exit:



The next Input required is based on the type inlet selected above. The following example shows the input required for a MI-1A.

```
C:\ MI-1.EXE
ENTER STATION NUMBER <IF KNOWN> 36+00
                PIPE SIZE
1. 30 in. ROUND      5. 29 in. x18 in. ARCH
2. 36 in. ROUND      6. 36 in. x23 in. ARCH
3. 42 in. ROUND      7. 44 in. x27 in. ARCH
4. 48 in. ROUND      8. 51 in. x31 in. ARCH

ENTER CHOICE FROM ABOVE <1,2,3,4,5,6,7 OR 8>_
```

```
C:\ MI-1.EXE
ENTER DEPTH TO INLET FLOWLINE IN FT.<IF MIN. ENTER 4.85> 4.85
```

Example Output (C:\Q\MI-1.TXT):

PROJECT NO--- TEST PROJECT
 COUNTY----- TEST COUNTY

*****MEDIAN INLET QUANTITIES*****

STATION 20+00
 DEPTH TO INLET FLOWLINE= 3.042 FT
 MI-1 WITH DEDUCTIONS FOR ONE 24 in. PIPE

CONCRETE CY	REINFORCEMENT LBS	GRATE LBS	APRON CY
0.747	54.000	250.000	0.532

STATION 36+00
 DEPTH TO INLET FLOWLINE= 4.85 FT
 MI-1A WITH DEDUCTIONS FOR TWO 36 in. PIPE

CONCRETE CY	REINFORCEMENT LBS	GRATE LBS	APRON CY
1.341	185.000	250.000	0.532

STATION 25+00
 HEIGHT OF INLET= .6667 FT
 MI-1B WITH DEDUCTIONS FOR TWO 65 in. x40 in. PIPE

CONCRETE CY	REINFORCEMENT LBS	GRATE LBS	APRON CY
0.313	45.000	250.000	0.532

STATION 45+55
 HEIGHT OF INLET= .5 FT
 MI-3 TYPE I INLET

CONCRETE CY	REINFORCEMENT LBS	GRATE LBS	APRON CY
0.097	18.000	250.000	0.532

SS-2A(64).EXE - SS-2A STORM SEWER QUANTITIES

Initial Input Required: Station of Inlet, Side of Roadway (L or R), Length of Inlet (5,10, or 15), Width of Inlet in Ft., Height of Inlet in Ft., Conc. Pavement Used?

```
Untitled
THIS PROGRAM CALCULATES SS-2 INLETS
C.Y. CONCRETE, POUNDS OF STEEL, AND BAR LIST
OUTPUT SAVED IN FILE C:\Q\SS-2A.TXT

VERSION 6.0 (64 BIT)                                OCT 10, 2011
DATE : 10-17-2011
PROJECT NO. : ██████████
COUNTY :

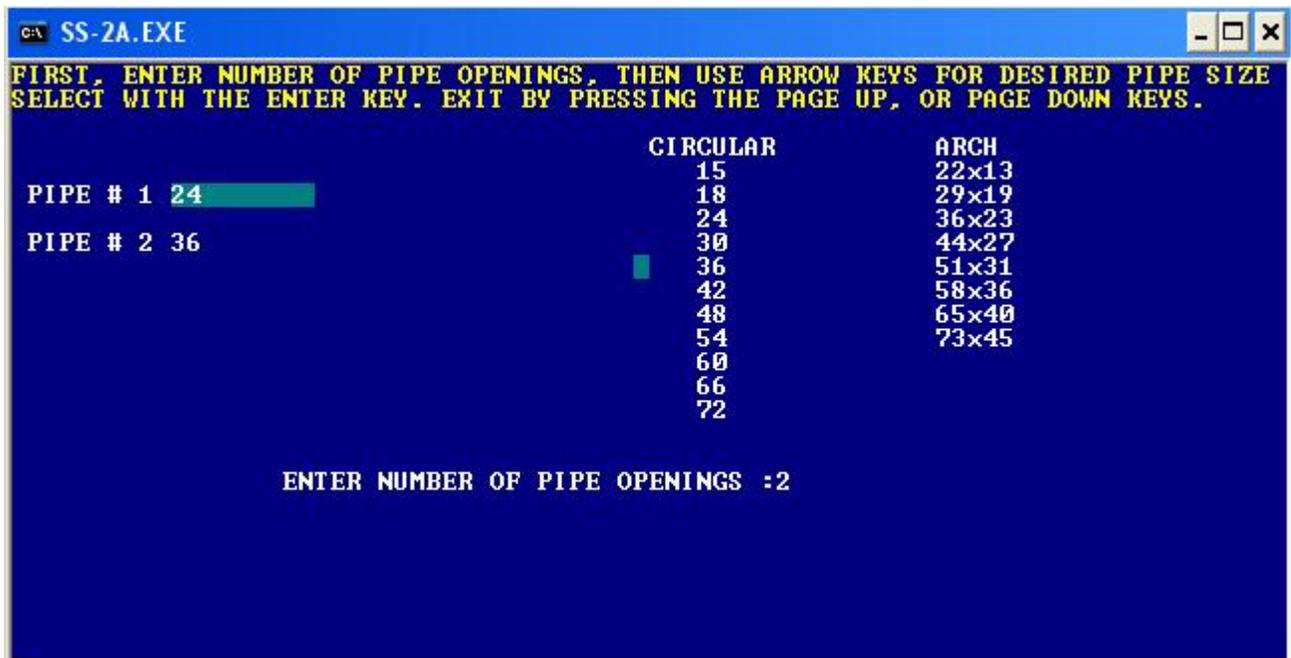
ENTER STATION OF INLET..... :
ENTER SIDE OF ROADWAY INLET IS LOCATED ON (L,R)..... :

STANDARD LENGTH OF INLET IS 5'-0''
WHEN 1 EXTENTION IS INCLUDED THE LENGTH WILL BE 10' - 0''
AND WITH 2 EXTENTIONS LENGTH WILL BE 15' - 0'' .
ENTER LENGTH (5,10,15)..... :

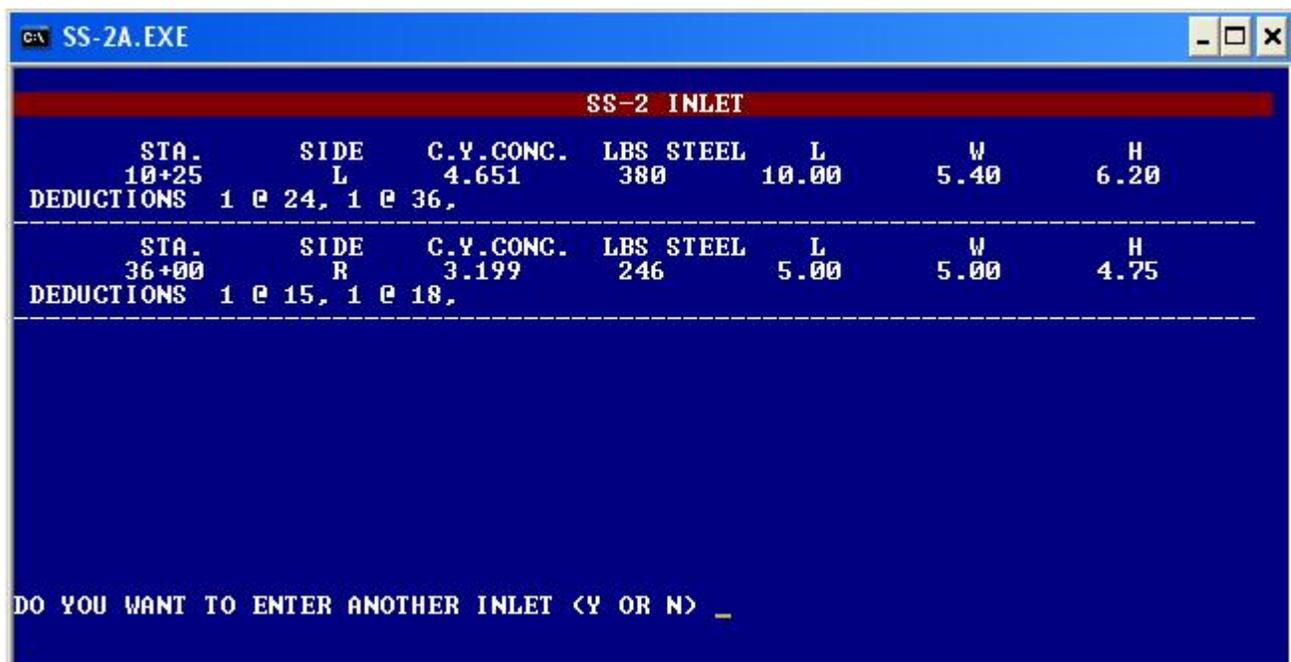
ENTER WIDTH (FEET AND DECIMAL)..... :
ENTER HEIGHT (FEET AND DECIMAL)..... :

IS CONCRETE PAVEMENT USED (Y OR N)
```

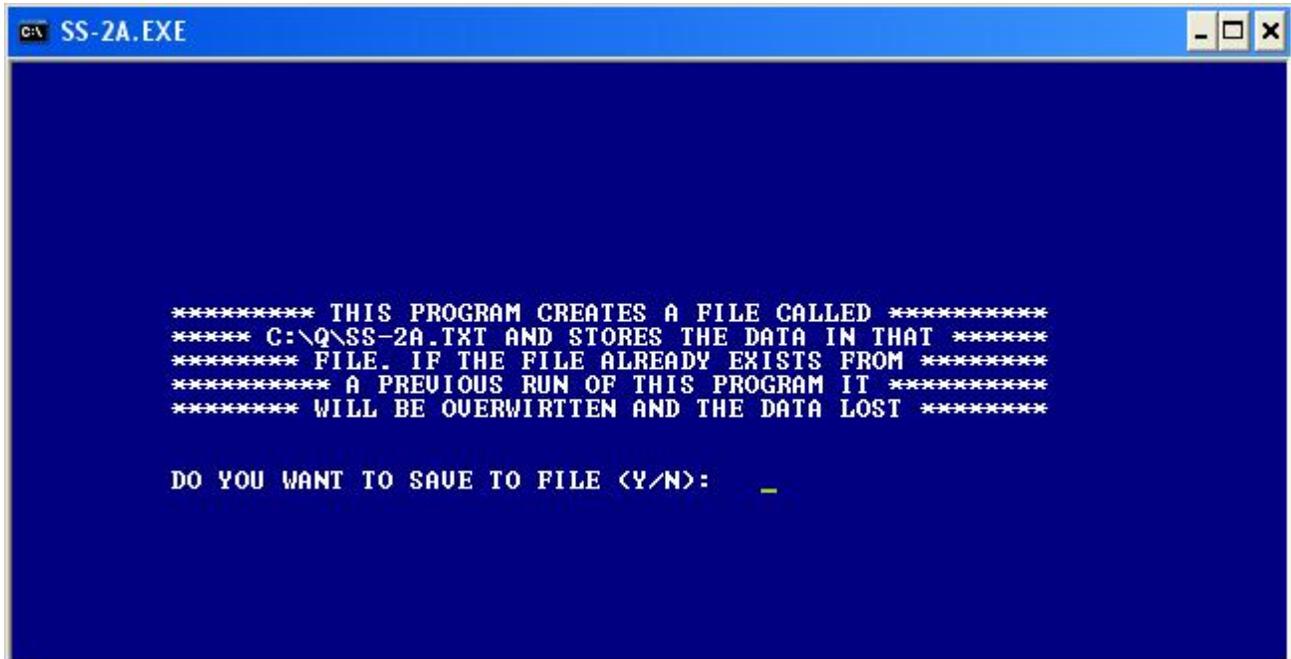
Next Input Required: Number of Pipe Openings and then selection of Pipe Sizes in Inches. The program first lets you input the number of openings and then the pipe sizes. The screen cursor moves to the proper locations automatically. Use the arrow keys and Page keys as indicated.



The results of the calculation are display on the screen as each inlet is entered as follows:



When finished entering inlet information, the following message displays allowing you to choose to save the output to a text file.



Example Output (C:\Q\SS-2A.TXT):

```

DATE          :04-11-2007
PROJECT NO.   :TEST PROJECT
COUNTY       :TEST COUNTY

===== SS-2 INLET =====
      STA.      SIDE   C.Y.CONC.  LBS STEEL   L      W      H
      10+25     L      4.651    380        10.00   5.40   6.20
DEDUCTIONS 1 @ 24, 1 @ 36,
-----
      STA.      SIDE   C.Y.CONC.  LBS STEEL   L      W      H
      36+00     R      3.199    246         5.00   5.00   4.75
DEDUCTIONS 1 @ 15, 1 @ 18,
-----

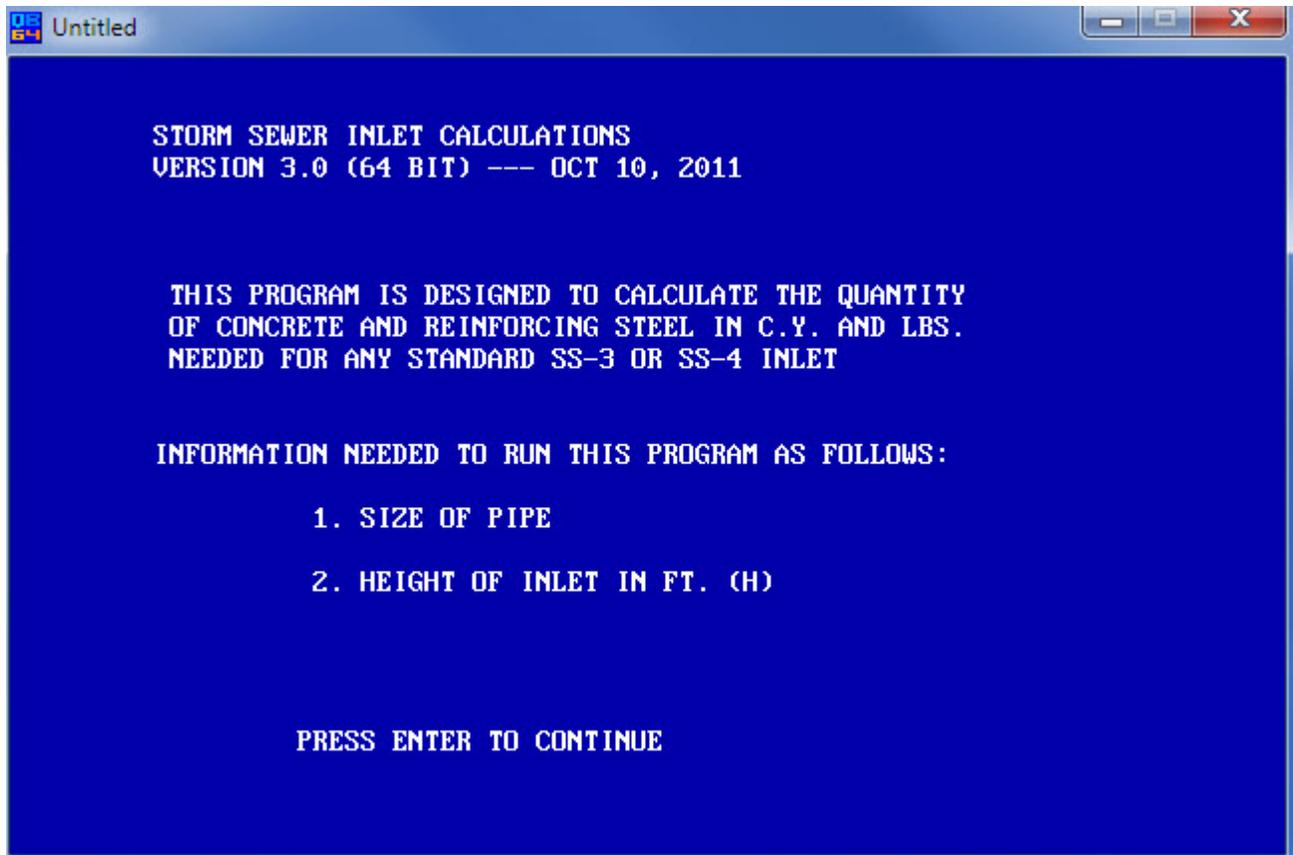
GRAND TOTAL FOR STEEL = 626.19 lbs
GRAND TOTAL FOR CONCRETE = 7.851 c.y.

```

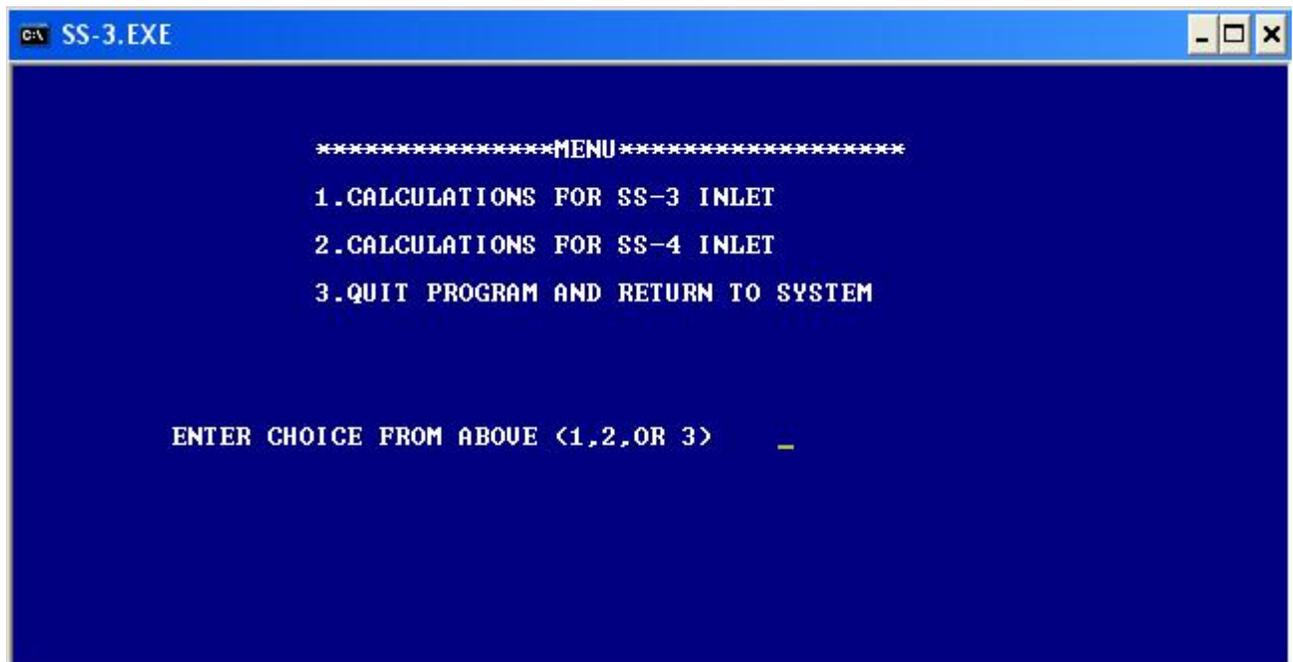
SS-3(64).EXE - SS-3 OR SS-4 STORM SEWER QUANTITIES

Designed to calculate concrete and reinforcing steel for any standard SS-3 or SS-4 Inlet.

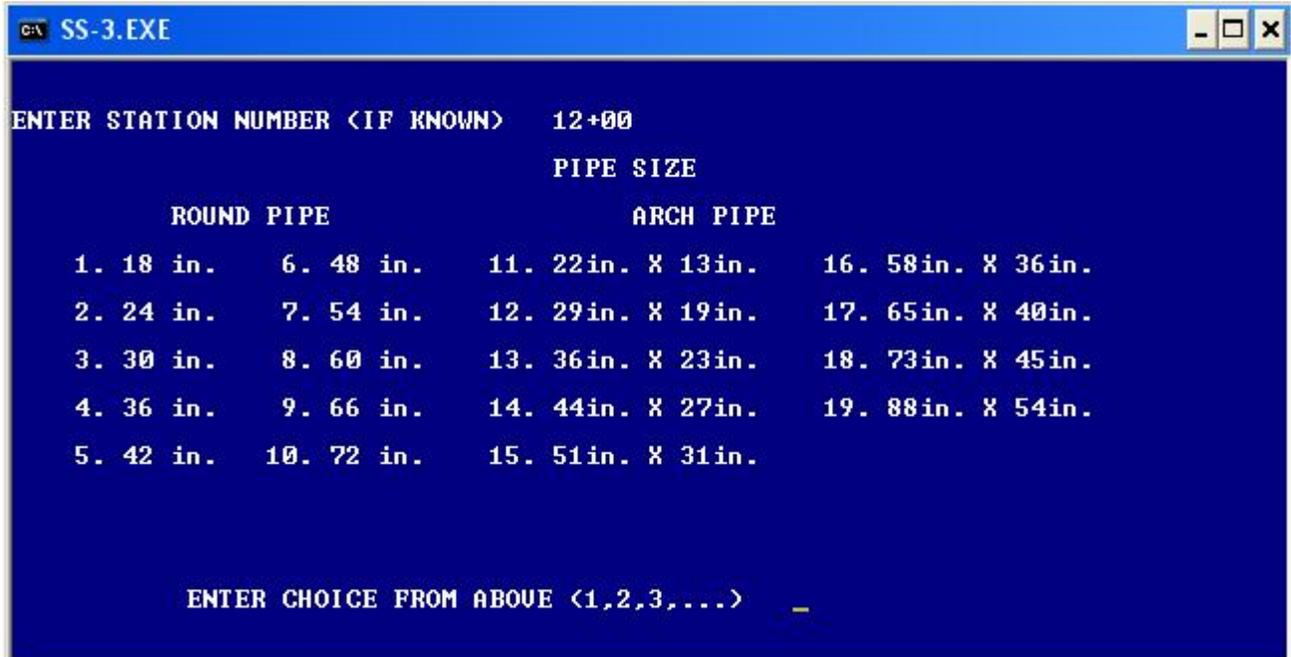
Input Required: Size of pipe in Inches, Height of Inlet in Ft.



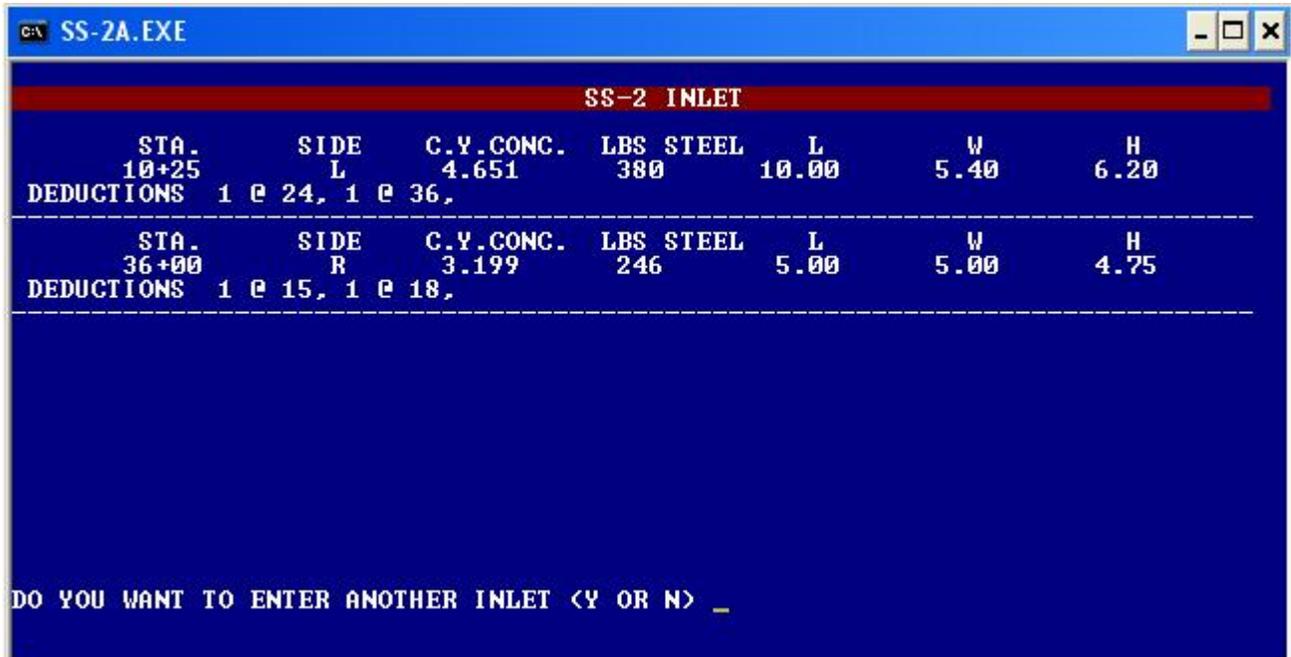
Initial Input requires that you choose to calculate quantities for either a SS-3 or SS-4 Inlet or to exit.



Next Input Required: Station and Pipe Size in Inches. The pipe size choices change depending on which type of Inlet selected. This example shows the choices for a SS-3 Inlet.



The output of the calculations are displayed on the screen for each inlet entered.



Example Output (C:\Q\SS-3.TXT):

PROJECT NO-- TEST PROJECT

COUNTY----- TEST COUNTY

*****STORM SEWER INLET QUANTITIES*****

STATION 12+00
HEIGHT OF INLET= 5.834 FT
SS-3 WITH DEDUCTIONS FOR ONE 42 in. PIPE

CONCRETE	REINFORCEMENT	GRATE	FRAME
CY	LBS	LBS	LBS
1.978	116.000	200.000	244.000

STATION 50+33
HEIGHT OF INLET= 4 FT
SS-4 WITH DEDUCTIONS FOR ONE 24 in. PIPE

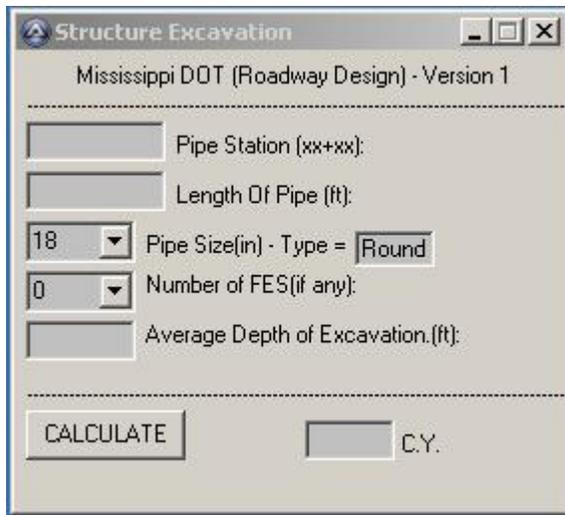
CONCRETE	REINFORCEMENT
CY	LBS
0.740	31.000

STREXC.EXE - Structure Excavation Quantities

Displays a dialog box that can calculate cubic yards of structure excavation for pipes.

Input Required:

1. Pipe Station (Optional)
2. Length of Pipe in Ft.
3. Pipe Size/Span in Inches (Selectable)
4. Number of Flared End sections (Selectable)
5. Average Depth of Excavation in Ft.



Once input is given the user pressed the CALCULATE button which will give the results in cubic yards. If invalid input is given the user will be prompted with the reason for the error. Valid calculations are written to a user defined ASCII text file , which is displayed when the user exits. Giving the ability to view, modify, or print the output.

Example Output (Default = exc.txt):

```

exc.txt - Notepad
File Edit Format View Help
-----
ESTIMATED STRUCTURE EXCAVATION QUANTITIES - 04/11/2007
-----
STA.11+00      Length=28      Dia./Span=48      FES: 2
Avr.Depth=3.9  CU.YDS.: 45.405
-----
TOTAL FOR STRUCTURE EXCAVATION IS: 45.4 C.Y.

```

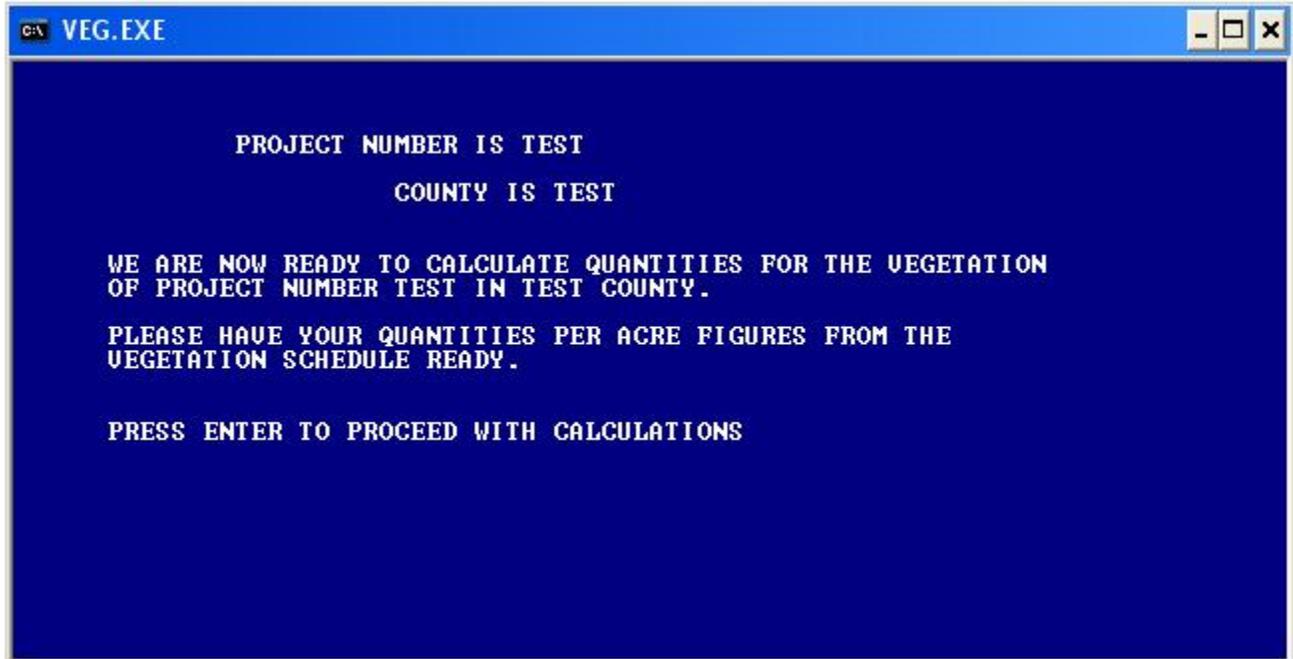
VEG.EXE - Vegetation Quantities (QBasic Version)

See CADD Manual Chapter on Vegetation for more information on input requirements.

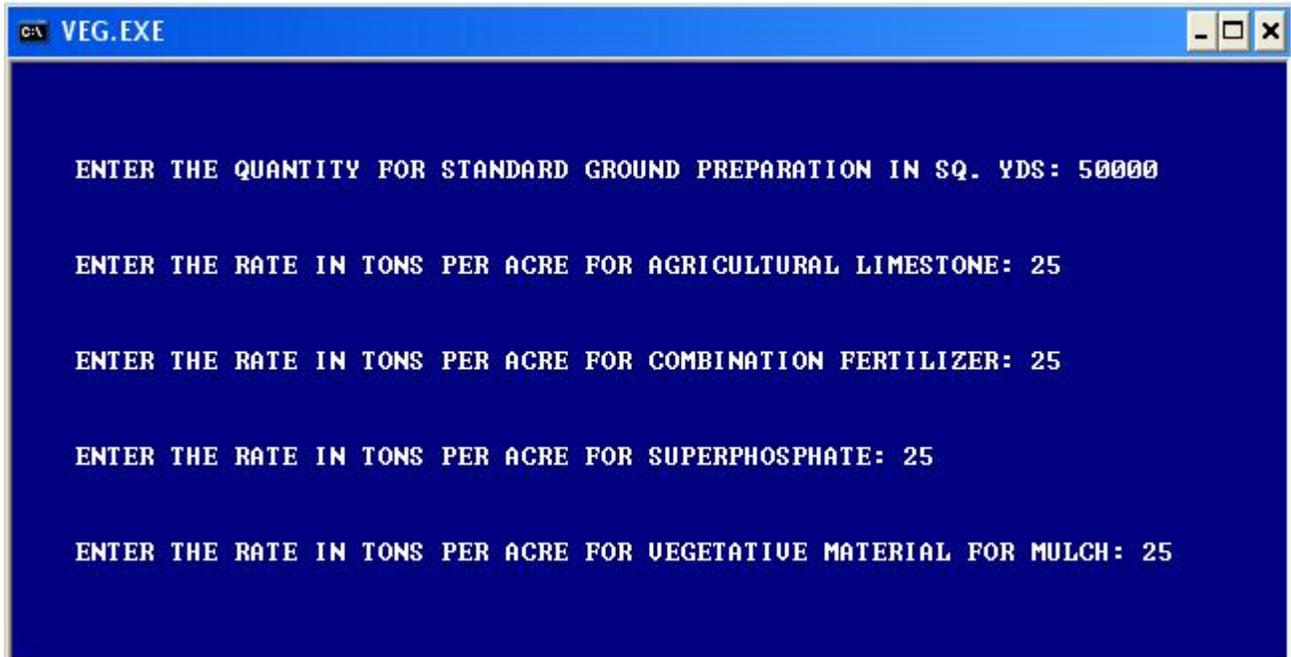
Inputs Required: Rates per Acre and Percentage of treatment from the Vegetation Schedule

- Standard Ground Preparation in S.Y.
- Agricultural Limestone per Acre
- Fertilizer 13-13-13 per Acre
- Fertilizer 13-13-13 (Temporary) per Acre
- Superphosphate per Acre
- Veg. Material For Mulch per Acre

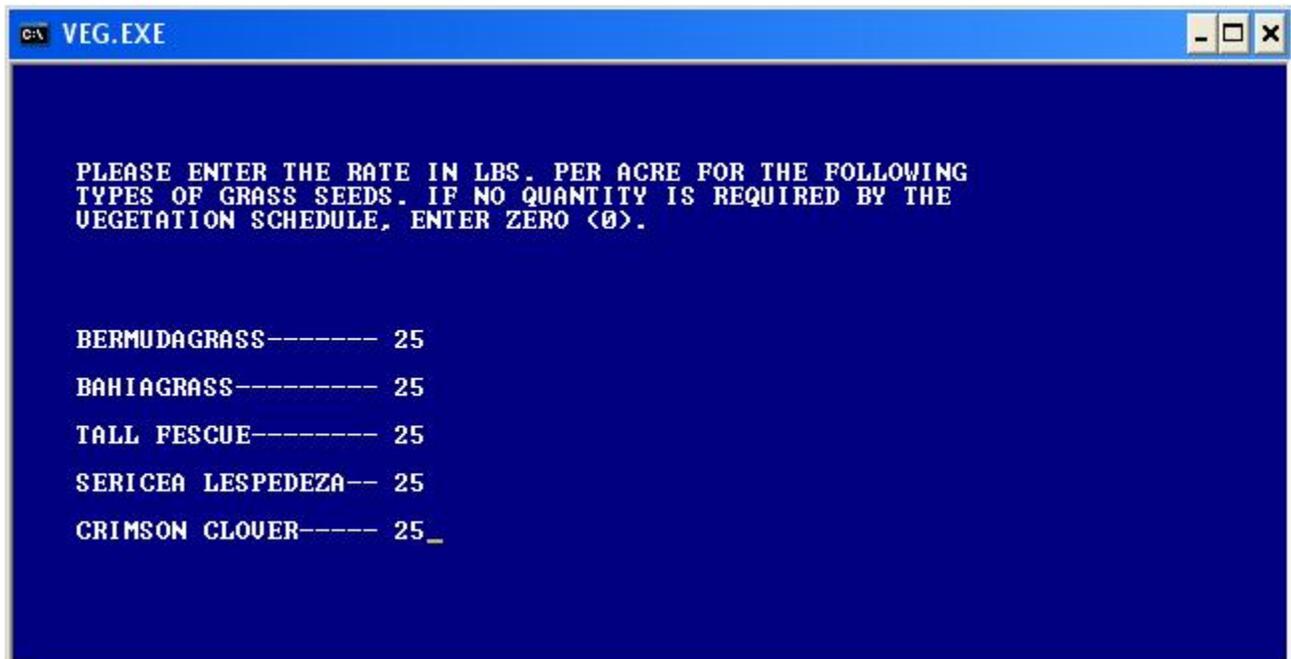
Veg. Material For Mulch (Temporary) per Acre
Bermudagrass Lbs. per Acre
Bahagrass Lbs. per Acre
Tall Fescue Lbs. Per Acre
Sericea Lespedeza Lbs. Per Acre
Crimson Clover Lbs. Per Acre
Brown Top Millet (Temp) Lbs. Per Acre
Rye Grass (Temp) Lbs. Per Acre
Oats (Temp) Lbs. Per Acre



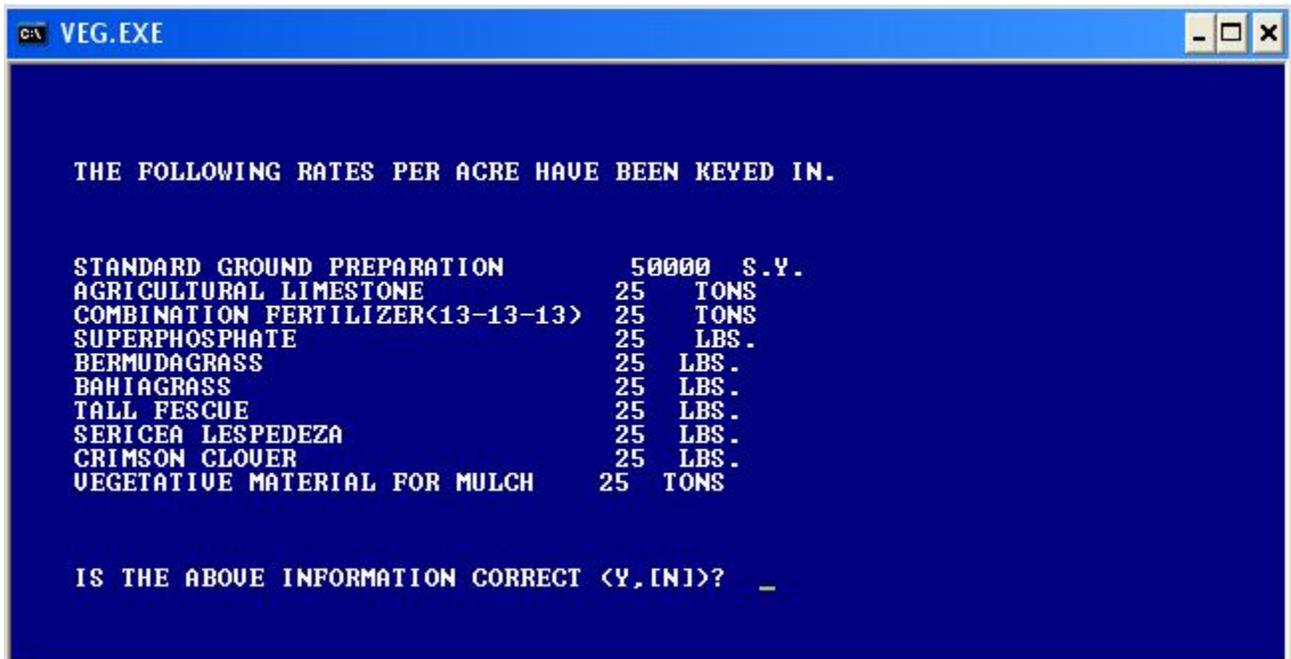
You will now enter the area of Standard Ground Preparation and rates for materials listed on the vegetation schedule.



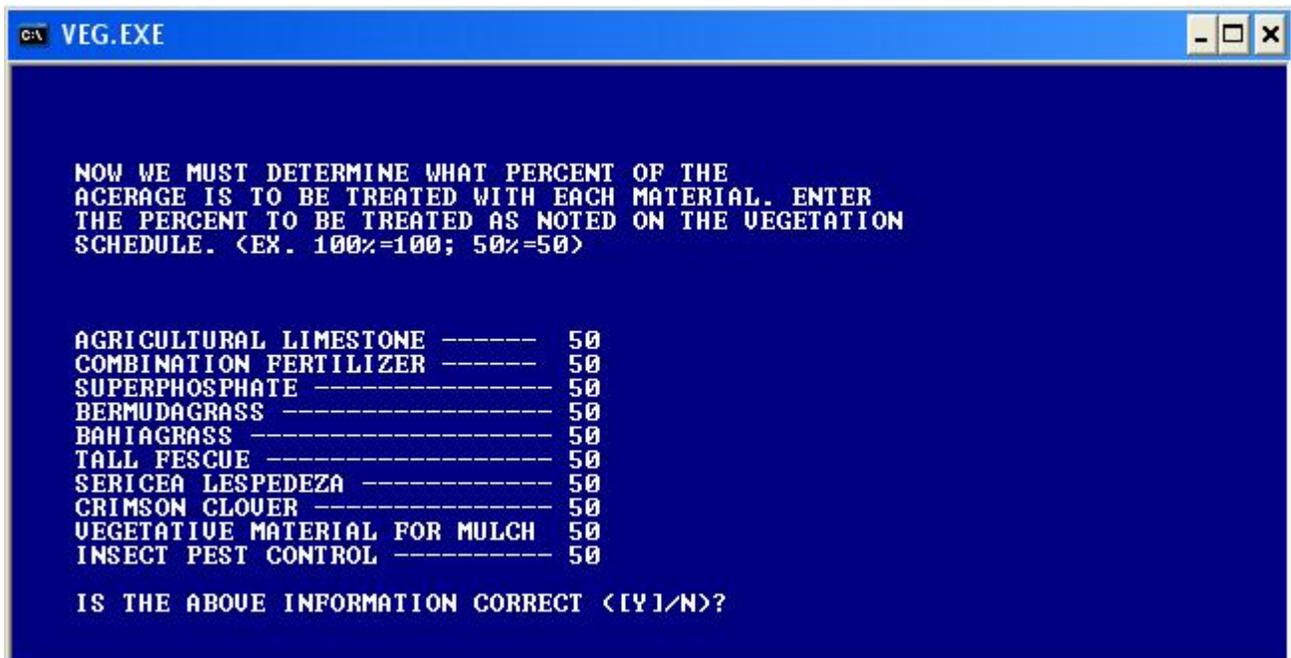
Enter the rates per acre for grass seeds as per the vegetation schedule:



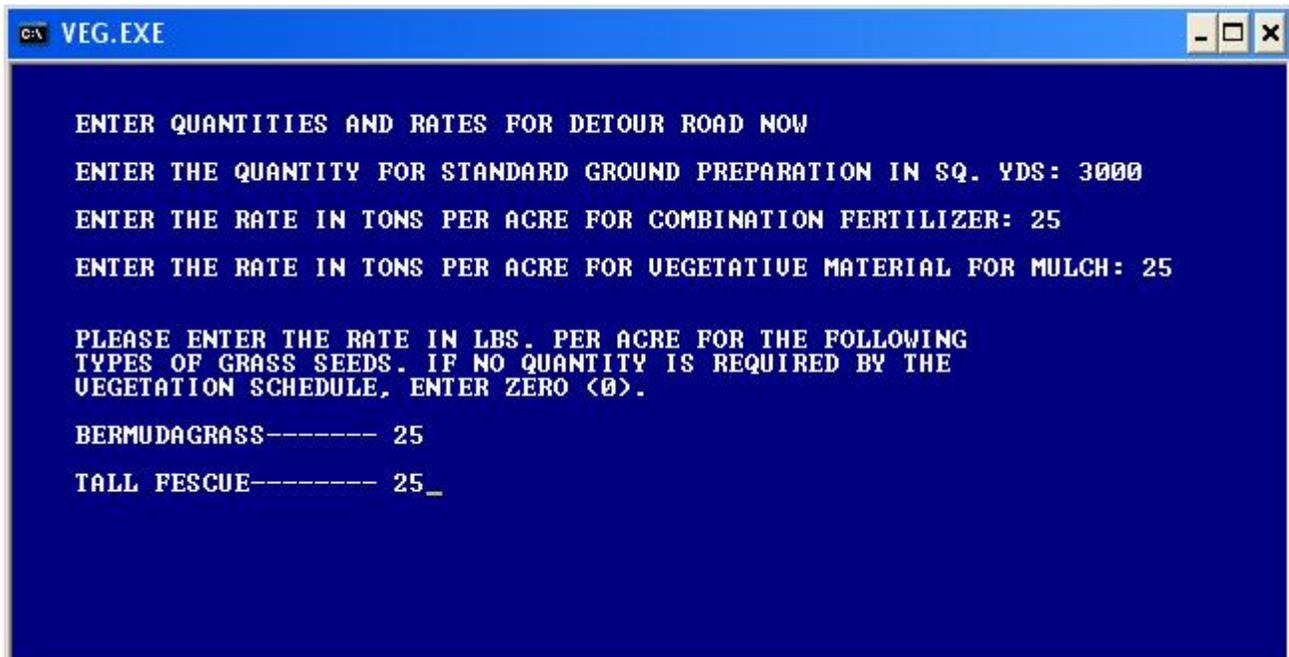
The rates you entered are displayed and you are allowed to correct them if needed:



Now you must enter the percent of acreage to be treated for each type of material. The percentages are shown on the vegetation schedule:



If your project requires temporary erosion control during construction for Detour Roads you can select to enter them:



The values you enter for the Detour Roads are displayed and it allows you to correct them if needed:

```
C:\ VEG.EXE

THE FOLLOWING QUANTITIES AND/OR RATES PER ACRE HAVE BEEN ENTERED

STANDARD GROUND PREPARATION      3000 S.Y.
COMBINATION FERTILIZER<13-13-13> 25 TONS
BERMUDAGRASS                      25 LBS.
TALL FESCUE                       25 LBS.
VEGETATIVE MATERIAL FOR MULCH     25 TONS

IS THE ABOVE INFORMATION CORRECT <Y/IN>? _
```

The program will then output the calculations. First the MAINLINE items are shown, press Enter to see Temporary.

```
C:\ VEG.EXE

*****MAINLINE EROSION CONTROL ITEMS*****
AGRICULTURAL LIMESTONE ----- 129.13 TONS
COMBINATION FERTILIZER ----- 129.13 TONS
SUPERPHOSPHATE ----- 129.13 TONS
BERMUDAGRASS ----- 129.13 LBS.
BAHIAGRASS ----- 129.13 LBS.
TALL FESCUE ----- 129.13 LBS.
SERICEA LESPEDEZA ----- 129.13 LBS.
CRIMSON CLOVER ----- 129.13 LBS.
VEGETATIVE MATERIAL FOR MULCH-- 129.13 TONS
INSECT PEST CONTROL ----- 5.17 ACRES

PRESS ENTER TO VIEW TEMPORARY EROSION CONTROL QUANTITIES._
```

At this screen showing temporary quantities, the program will ask if you wish to save the results to a text file:

```
C:\ VEG.EXE

TEMPORARY EROSION CONTROL QUANTITIES

STANDARD GROUND PREPARATION----- 3000.00 S.Y.
COMBINATION FERTILIZER----- 15.50 TONS
BERMUDAGRASS----- 15.50 LBS.
TALL FESCUE----- 15.50 LBS.
VEGETATIVE MATERIAL FOR MULCH----- 15.50 TONS

DO YOU WISH A COPY OF THESE QUANTITIES <Y/IN>?
```

Example Output (C:\Q\VEG.TXT):

PROJECT NO.-----TEST COUNTY-----TEST
04-11-2007

*****EROSION CONTROL QUANTITIES*****

MAINLINE QUANTITIES

212-B	STANDARD GROUND PREPARATION	50000.00 SQ. YDS.
213-A	AGRICULTURAL LIMESTONE	129.13 TONS
213-B	COMBINATION FERTILIZER (13-13-13)	129.13 TONS
213-C	SUPERPHOSPHATE	129.13 TONS
214-A	SEEDING (BERMUDAGRASS)	129.13 LBS
214-A	SEEDING (BAHIAGRASS)	129.13 LBS
214-A	SEEDING (TALL FESCUE)	129.13 LBS
214-A	SEEDING (SERICEA LESPEDEZA)	129.13 LBS
214-A	SEEDING (CRIMSON CLOVER)	129.13 LBS
215-A	VEGETATIVE MATERIAL FOR MULCH	129.13 TONS
220-A	INSECT PEST CONTROL	5.17 ACRES

DETOUR QUANTITIES

212-B	STANDARD GROUND PREPARATION	3000.00 SQ. YDS.
213-B	COMBINATION FERTILIZER (13-13-13)	15.50 TONS
214-A	SEEDING (BERMUDAGRASS)	15.50 LBS
214-A	SEEDING (TALL FESCUE)	15.50 LBS
215-A	VEGETATIVE MATERIAL FOR MULCH	15.50 TONS

PROJECT NO.-----TEST COUNTY-----TEST

04-11-2007

*****EROSION CONTROL QUANTITIES*****

TOTAL PROJECT QUANTITIES

212-B	STANDARD GROUND PREPARATION	SQ. YDS.	53000
213-A	AGRICULTURAL LIMESTONE	TONS	129
213-B	COMBINATION FERTILIZER (13-13-13)	TONS	145
213-C	SUPERPHOSPHATE	TONS	129
214-A	SEEDING (BERMUDAGRASS)	LBS	145
214-A	SEEDING (BAHIAGRASS)	LBS	129
214-A	SEEDING (TALL FESCUE)	LBS	145
214-A	SEEDING (SERICEA LESPEDEZA)	LBS	129
214-A	SEEDING (CRIMSON CLOVER)	LBS	129
215-A	VEGETATIVE MATERIAL FOR MULCH	TONS	145
220-A	INSECT PEST CONTROL	ACRES	5

VEGETATION.EXE - Vegetation Quantities (Visual Basic Version)

Input Required: Rates per Acre and Percentage of treatment from the Vegetation Schedule

NOTE: This program does create a text file in the directory c:/Q. Use the File < Save File As option on the dialog to save the output.

Output is similar to that shown for the QBasic Program above.

Vegetation Quantities Ver. 1.1
5/05

File Help

**Mississippi Department of Transportation
Roadway Design Division
Vegetation Quantities**

Project Number County

	Quantities	Percentages	Totals
Standard Ground Preparation	<input type="text"/> Sq. Yds.		
Agricultural Limestone	<input type="text"/> Tons / Acre	<input type="text" value="100"/> %	<input type="text"/> Tons
Combination Fertilizer (13-13-13)	<input type="text"/> Tons / Acre	<input type="text" value="100"/> %	<input type="text"/> Tons
Superphosphate	<input type="text"/> Tons / Acre	<input type="text" value="100"/> %	<input type="text"/> Tons
Vegetative Material For Mulch	<input type="text"/> Tons / Acre	<input type="text" value="100"/> %	<input type="text"/> Tons
Bermudagrass	<input type="text"/> Lbs / Acre	<input type="text" value="100"/> %	<input type="text"/> Lbs
Bahigrass	<input type="text"/> Lbs / Acre	<input type="text" value="100"/> %	<input type="text"/> Lbs
Tall Fescue	<input type="text"/> Lbs / Acre	<input type="text" value="100"/> %	<input type="text"/> Lbs
Sercia Lespedza	<input type="text"/> Lbs / Acre	<input type="text" value="100"/> %	<input type="text"/> Lbs
Crimson Clover	<input type="text"/> Lbs / Acre	<input type="text" value="100"/> %	<input type="text"/> Lbs
Insect Pest Control		<input type="text" value="50"/> %	<input type="text"/> Acres

QUANTITY(64).EXE - Typical Section Quantities

This program has the ability to calculate both English and Metric quantities for both Asphalt and Concrete Pavement.

At the end of this program it will return to the following screen to allow you to calculate another run. Hit ENTER to terminate the program. You MUST end the program before the calculations are written to the text file.

```
----- TYPICAL SECTION QUANTITY PROGRAM -----
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
Roadway Design Division

Written: January 26, 1996   Revised: October 10, 2011   Current Version: 6

Revised for 64 BIT
Program Name: QUANTITY(64).EXE
Other Programs Needed: QASPHALT(64).EXE, QASPHM(64).EXE, QCONC(64).EXE
QCONCDB(64).EXE, QCONCM(64).EXE, QCONCDB(64).EXE
QCONCDBM(64).EXE, QCONCDBM(64).EXE

Program Description: The following computer program is written in
QUICKBASIC and was created to calculate quantities.
The program can use either English OR Metric units.

HIT ENTER TO TERMINATE PROGRAM

Do you wish to use English or Metric units (E/M)?
```

The program calls several sub-routine programs based on type of quantities being calculated. This sub-programs are listed below:

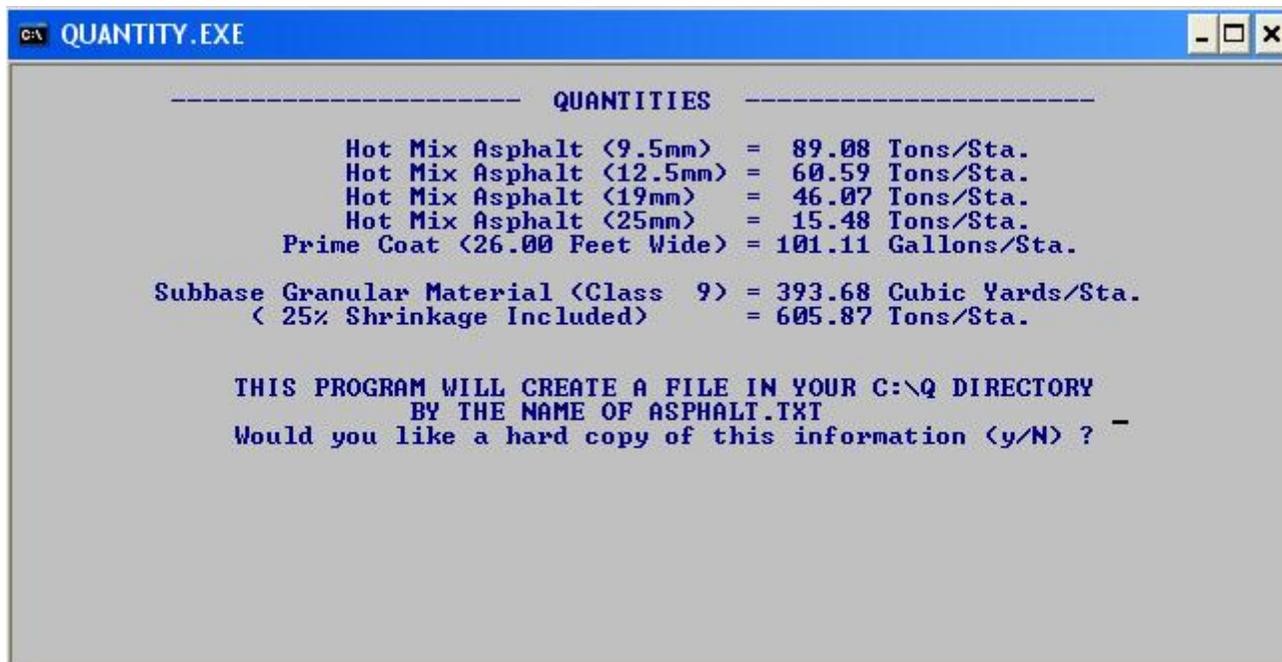
QASHPHALT(64).EXE
QSPHM(64).EXE
QCONC(64).EXE
QCONCDB(64).EXE
QCONCM(64).EXE
QCONCDBM(64).EXE

The proceeding Input Varies greatly depending on the answers to the questions and the type of pavement. The following is the example input required for Asphalt Pavement:

Right Lane Width Feet
Right Lane Slope %
Left Lane Width Feet
Left Lane Slope %
Right Shoulder Width Feet
Right Shoulder Slope %
Left Shoulder Width Feet
Left Shoulder Slope %

Right Subgrade Slope %
Left Subgrade Slope %
Right Side Slope (_:1)
Left Side Slope (_:1)
Hot Mix Asphalt 9.5mm Inches
Hot Mix Asphalt 12.5mm Inches
Hot Mix Asphalt 19mm Inches
Hot Mix Asphalt 25mm Inches
Prime Coat?
Subbase Granular Course Inches
Subbase Class
Shrinkage Factor?
Lime Fly-Ash Inches
Additional Width Lime Fly-Ash Width Feet
Lime Percentage
Lime Treatment Thickness Inches
Lime Percentage for Lime Treatment
Does Lime Treatment Extend from Sideslopes?
Correction of subgrade slope?
Distance in feet crown of subgrade is to be moved (+right)(-left)
Slope the crown is to be move on +/- %
Separate shoulder granular material?
Shoulder Granular Material Thickness Inches
Right Subgrade Slope (Under Shoulder) %
Left Subgrade Slope (Under Shoulder) %
Shoulder Granular Material Class?
Shrinkage Factor %

Shown below is an example of output of quantities to the screen. You must tell the program if you wish to save the output to a text file:



Example Output for Asphalt (C:\Q\ASPHALT.TXT):

PROJECT NO. : 1 DATE : 08-17-2005
COUNTY : 1 USER : 1
DESCRIPTION : 1
VERSION : 5

MISSISSIPPI DEPARTMENT OF TRANSPORTATION PROGRAM
TO CALCULATE ASPHALT PAVING QUANTITIES (ENGLISH)

Right Lane Width = 24.00 Feet
Right Lane Slope = -2.0 %
Left Lane Width = 12.00 Feet
Left Lane Slope = -2.0 %
Right Shoulder Width = 10.00 Feet
Right Shoulder Slope = -4.0 %
Left Shoulder Width = 4.00 Feet
Left Shoulder Slope = -4.0 %
Right Subgrade Slope = -3.0 %
Left Subgrade Slope = -3.0 %
Right Side Slope = 4:1
Left Side Slope = 4:1
Right Shoulder Subgrade Slope = -3.0 %
Left Shoulder Subgrade Slope = -3.0 %

ITEM	DEPTH (Inches)	QUANTITY
Hot Mix Asphalt (9.5mm)	3.00	66.27 Tons/Sta.
Hot Mix Asphalt (12.5mm)	2.00	44.48 Tons/Sta.
Hot Mix Asphalt (19mm)	2.00	44.72 Tons/Sta.
Prime Coat (38.00 Feet Wide)		147.78 Gallons/Sta.
Shoulder Gran. Matl. (Class 5)	12.00	77.02 C.Y./Sta.
(Quantity based on 25% shrinkage)		132.05 Tons/Sta.
Subbase Gran. Matl. (Class 9)	12.00	262.07 C.Y./Sta.
(Quantity based on 25% shrinkage)		403.32 Tons/Sta.
Lime for Lime Fly-Ash (50.0%)	6.00	85.50 Tons/Sta. *
Fly-Ash for Lime Fly-Ash (12%)	6.00	20.52 Tons/Sta. *
Water Treatment for Lime Fly-Ash		666.67 S.Y./Sta. *
Lime for Lime Treatment (25.0%)	3.00	15.63 Tons/Sta.
Water Treatment for Lime Treatment (50.00 feet wide)		555.56 S.Y./Sta.

* LFA quantities based on 12.00 feet additional width at each pavement edge

Crown of subgrade shifted 10.00 feet on a -2.00% slope

Sqs (Summary Of Quantities) Excel Linking

A procedure is in place to create SQS (Summary of Quantities) sheets using Microsoft Excel files. (Microsoft Office Version 2010 recommend.)

These files are located in the folder ...\\RWDDATA\GROUP\SQS and should be copied to your project folder.

SQS_2010_COM.xlsm : columns for one (1) county.

SQS_2010_COM_2.xlsm : columns available to do (2) county/funding separations.

SQS_2010_COM_3.xlsm : columns available to do (3) county/funding separations.

Note: Earlier SQS file names did not have the characters "2010" in the file name. Those earlier files will not function correctly in Office 2010.

Filenames without the characters "COM" in the filename will not function correctly without using the "RWDDATA" name dataset.

Those that do not have this in their name will be unable to import an update pay item list.

Information on how to convert older excel files can be found in the training material (video) below.

A training video has also been created to demonstrate how to use the SQS excel files.

The SQS Excel Videos come in a 10 part series located on Roadway Design Training Videos Web Site:

http://sp.gomdot.com/Roadway%20Design/CADD_Info/Pages/Training-Videos.aspx

Detailed instructions can also be found in the excel file itself (on the "Instructions" tab).

Located in the folder ...\\RWDDATA\GROUP\SQS are template design files for linking excels files to sheets.

This design file contains ten (10) pre-placed plan sheet cells and placement guide point for placing the links.

This can be copied to your project folder. We recommend the file name not be changed.

SQS_SH.DGN : columns for one (1) county.
SQS_SH_2.DGN : columns available to do (2) counties or for other quantity separations.
SQS_SH_3.DGN : columns available to do (3) counties or for other quantity separations.

Metric Versions of all the above files are also available.

General Information - for Single Column Funding Excel file. Others are similar, except for the file names.
(See Above)

1. This excel spreadsheet is used to create a Summary of Quantities data file for Construction Division and linked to Microstation for plotting.
2. The latest excel versions will only work with the RWDDATA setup.
3. Enter the Project Number in the excel file that it is associated with. This is located near the top of Column A, which is just above the first pay item selection cell.
4. All quantity data needs to be entered in this spreadsheet, NO quantity data should physically entered in the Microstation Design files.
5. Project related footnotes can also be entered in another excel file and pasted into the design files. SEE FOOTNOT.XLS locate in the same directory as the excel file.
6. Project related footnotes can also be entered in another excel file and pasted into the design files. SEE FOOTNOT.XLS locate in the same directory as the excel file.
7. Retain this excel spreadsheet with its corresponding Microstation design file. This will maintain the links and give the ability to revise items.
8. This spreadsheet allows the distribution of preliminary project quantities without having to access Microstation.
9. The Master data source pay item list is an ascii file located in the following folder and filename - [DRIVE]:\\RWDDATA\\INPUT\\SQS-DAILY-ENGLISH.TXT
10. In "Roadway Design", this data source is auto-updated daily and automatically distributed to RWD computers each night.
11. For users outside of Roadway Design, this text file is updated on the MDOT ftp site. Copy this file to the folder [DRIVE]:\\RWDDATA\\INPUT\\
12. For all users -- to update the pay items list in this spreadsheet, use the "Import Data from ...\\rwddata\\input..." option under "SQS_options" tab on the Ribbon.
13. The spreadsheet contains a "Master List" tab. DO NOT manually modify this worksheet. It contains the master list of pay items used to populate this file.

14. To generate a data file for Construction Division worksheet, use the "Create Constructions List" option" under "SQS_Options" on the Ribbon.
15. NEVER manually create your own pay item or modify a pay item description. Please contact your supervisor or construction if a new item is needed.

How To Enter Data on the SQS Excel Sheet

1. Select the "SQS Sheets" worksheet tab and to make it active.
2. Update the "Master List" of pay items. Use "SQS_Options > Import data from... option on the ribbon bar.
Tip: The Pay Item list in the excel file is static. It has to be manually updated from the source indicated.
3. Optional: Select a pay item filter grouping in the "SQS_Options" ribbon under the "Choose Sort Order" field. (Default is to "Show All" Pay items)
Tip: The Pay Item List is very large making it time-consuming to scroll through. The filter is used make it easier to find specific types of pay items.
4. Locate the yellow-shaded column labeled as: "SELECT A PAY ITEM FROM THIS COLUMN TO POPULATE SHEETS"
5. Select the "LIST" arrow at the right most end of the cell. Scroll to the desired pay item and select it.
6. The "Sheet" table next to your row selection is automatically populated with the pay item number, description, and unit. If the pay item requires a supplemental description, enter it in the purple-shaded column. The column is directly right of the yellow column.
7. If there are Alternate pay items in your list these need to be have an "Alternate Code" entered in the orange column labeled ALT.
Tip: Use AA1 for the first set of pay items and enter AA2 for the alternate set of pay items. If other alternates are required use AB, AC, AD, etc.
8. Continue by selecting additional pay items to fill-in the remainder of the sheets.
9. Enter the pay items in numerical order. Anticipate inserting pay item later, and try to leave blank lines to accommodate these.
10. The "SQS Sheets" worksheet contains ten (10) blank SQS sheets for entering data.
11. Each of the SQS Sheet tables are numbered and each single sheet section is designed to fit inside a single Roadway Design Plan Sheet Cell.
12. Calculate all Quantities and manually enter the amounts in the PRELIMINARY Column for each pay item you have entered.
13. If you move a pay item in the yellow column cells to a different row you must also manually move the quantity numbers in the PRELIMINARY column, they will not move together.
14. You CANNOT add or delete a column or row on the SQS_SHEETS worksheet.
15. You CAN copy pay items or descriptions in the first 2 columns (A or B shaded cells) and paste them to other cells in the same column.

16. You can delete a pay item in columns A or B by selecting the cell and pressing the DELETE key on the keyboard.

How to Link the Spreadsheet Into Microstation

This process does NOT require the use of "Axioms Office Importer". Do NOT use Office Importer to link the data to Microstation.

1. You can link the sheets in the "SQS Sheets" worksheet tab at any stage of completion, the link allows updating the Microstation file to match each sheet. You can copy a template design file called "sqs_sh.dgn" located in the folder [DRIVE]:\RWDDATA\GROUP\SQS folder to your project -or- Create a new design file.
Tip: We recommend that you keep the name sqs_sh.dgn.
Tip: The template file (sqs_sh.dgn) contains ten (10) blank SQS sheets with guide points already placed to help you link the excel spreadsheet data into Microstation at the correct size.
Tip: If creating your own file, use the cell "SQSGUIDE" as a guide to linking data. The origin of the cell matches the corner of a Plan Sheet border cell.
2. In the spreadsheet, locate a sheet (example is, Sheet 1) and use a "hold and drag" method of selecting the entire sheet (only 1 sheet at a time, make sure to select the entire sheet section).
3. Once the selection is made, use the "COPY" command in excel to place a copy of the selected data into the clipboards memory.
4. With your SQS design file open, position the view in Microstation at the location that matches the sheet number you copied in the previous step.
5. In Microstation, select the DZINE > PROPOSED > RECAP. > SQS > PASTE SQS SH LINKS command.
6. **IMPORTANT:** In the Microstation's TOOL SETTING dialog the tools options for Paste OLE (Object-Linking-Embedding) In the "Paste As:" field, select "LINK". (Tip: DO NOT use Picture or Embedded options. These two options will NOT maintain a link to this excel file.) In the "Method:" field, select "BY CORNERS".
7. Use the RED Active points of the SQSGUIDE cell as the corners that Microstation prompts for you to identify to paste the data.

You should now have the sheet pasted into Microstation. Continue to copy and paste all the other sheets that you have entered data into on the spreadsheet,

Tip: If you used the SQS template DGN file then you should delete any unused sheets in Microstation to avoid having them located during the batch plotting process.

For help in revising/updating the links and sheets in the design file, see the steps under "MAINTAINING THE LINK" section shown below.

Maintaining the Link

1. DO NOT delete the excel file, this file must exist to provide a way to update the linked sheets in Microstation.
2. Copying this excel file DOES NOT change the link to the original file that Microstation is linked too (even if the dgn is a copy). If you want to link to the new copied excel file, do the following:
 - A. Open the design file or copy of the design file and open the EDIT > LINKS dialog.
 - B. Select each linked excel item in the dialog and use the "CHANGE SOURCE" button to establish a new link to the copied excel file.
3. In Microstation you can locate and open the excel source by one of the following methods:
 - A. (Recommended) Use the Selection tool to double-click on the excel sheet object and the excel sheet will automatically open in the excel application.
 - B. Select the EDIT > LINKS commands. In the dialog, select from the list of links the item you want to open and press the OPEN SOURCE button.
4. If Excel is opened to a spreadsheet before opening a design file and you double-click on a linked sheet to open the source, you may get an error message until you close the open excel sheet.
5. After making a revision to a sheet in a Excel file, you may need to SAVE it before it will update in Microstation.
6. To update Microstation to match a revised Excel sheet, you can use one of the following methods:
 - A. (Recommended) Select the EDIT > UPDATE LINKS options. This will automatically update all revisions made in the linked excel sheets.
 - B. Select EDIT > LINKS, then select the items in the list and press the UPDATE NOW button.
 - C. Save and Close the saved Excel Sheet.

Creating the 4 CONSTRUCTION Data File

1. To create a data file in a format usable by Construction Division can use a worksheet tab is located in this Excel file called "4 CONSTRUCTION".
2. By default, this worksheet is empty. To populate the SQS Sheet data into this worksheet a macro has been provided within this excel file on the Ribbon Bar.
3. On the ribbon, locate the "SQS_Options > Create Construction's List" option and press the icon. This will populate the "4 Construction" worksheet based on the data you entered on the SHEETS.
4. This data is very dependent on the proper entry of data on the SHEETS worksheet. If the data formulas have been corrupted by a user's improperly cutting or moving data the 4 Construction

data may not be created properly. Below are some “rules” to follow concerning how data is properly entered:

- A. The “Sheet” section of the excel (the part that is copied and linked in Microstation) is filled in automatically. User SHOULD NEVER manually enter data, with the exception of the preliminary quantities.
- B. The cells on the “Sheet” are protected by default. All protected cells SHOULD NEVER have manually entered data. Doing so would will corrupt the formula and therefore corrupt the process of generating the 4 Construction worksheet.
- C. When you need to darken or thicken borderlines or enter heading above sections of pay items it MUST be done in the Microstation file using graphics elements.
- D. Take care in the where you enter the preliminary quantities. If they are placed in wrong row, this will interfere with the proper creation of the 4 Construction worksheet. This is the primary purpose of the colors column next to the quantities. They give visual clues to pay items that don’t have a quantity entered, or when one is entered in an incorrect column.
- E. A pay item that does not have a quantity entered next to it on its row will NOT be added to the 4 Construction worksheet.

The final formatted data on the 4 Construction worksheet can then be exported by Construction Division into their software.

Plotting the Microstation Design file with linked SQS Excel files

1. You MUST exit or close the excel sheet before you plot the objects. When the excel data sheet is open, Microstation may display a diagonal hatching object over the spreadsheet.
Tip: This hatching WILL plot as a shaded object. Closing out the excel file will eliminate this side effect.
2. The excel SQS sheets have been designed to fit within the limits of a PLAN Sheet cell when snapping to the red dots on the SQSGUIDE cell.
3. Using the "By-Corner" method of placing the link will create the linked object with a text size that falls within the normal range of standard text sizes.
4. If your SQS design file contains blank sheets then these may plot when using the "BATCH" plotting procedures. The sqs_sh.dgn template file contains 10 pre-made sheets. Remove the ones that are not used.

Miscellaneous Apps

ComputerName

Display network computer name.

Filename: *computername.exe*

Syntax : COMPUTERNAME

Autolt program that creates a dialog box that displays your workstations network computer name. A shortcut link in the desktop RWD APPS folder can be used to run the program



Date Edit

Ninotech Date Edit - Version 4.0

DISCLAIMER OF WARRANTY:

THE SOFTWARE PRODUCT IS PROVIDED "AS IS" AND WITHOUT WARRANTIES AS TO PERFORMANCE OF MERCHANTABILITY OR ANY OTHER WARRANTIES WHETHER EXPRESSED OR IMPLIED. THE USER MUST ASSUME THE ENTIRE RISK OF USING THIS PROGRAM. To the maximum extent permitted by applicable law, in no event shall Ninotech or its suppliers be liable for any special, incidental, indirect, or consequential damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information, or any other pecuniary loss) arising out of the use of or inability to use the SOFTWARE PRODUCT, even if Ninotech has been advised of the possibility of such damages.

Description:

Ninotech Date Edit is a shell extension that enables you to change the date and time of your files from inside the Windows Explorer. All you have to do is to open the Windows Explorer, right-click the item(s) of interest and choose "Edit Date" in the context menu.

Installation:

Uninstall any old copy of Ninotech Date Edit before installing this copy of Ninotech Date Edit.

Right-click on DATEE400.INF file and choose "Install" in the context menu. If a dialog appears asking the location of the files, navigate to the files and click OK (in most cases, the correct path will already be shown).

Requirements:

Ninotech Date Edit requires system libraries distributed with Microsoft Internet Explorer 3.0 or later.

Revision List:

* Version 4.0

Additions:

- Support for the Visual Styles introduced in Windows XP. This means that the graphical user interface of Date Edit matches the look of Windows XP.

Copyright © 1998-2001 Ninotech
All Rights Reserved

This program is freeware and may be redistributed without limit provided it is retained in its original form, with all files included.

logoff

LOGOFF is a command line executable that will log you out of your current Windows session.

Filename: *logoff.exe*

Syntax : LOGOFF

Command line executable that will log you out of your current Windows NT session. This command is helpful in batch or automation processes.

Warning

The command does not have a confirmation line or dialog box, it will immediately log you out upon execution.

PathCreator

LOGOFF is a command line executable that will log you out of your current Windows session.

Filename: *pathcreator.exe*

Syntax : `pathcreator [/q] <path>`

`/q` - run in quiet mode, with no dialog boxes or error messages. Useful if you run from an unattended batch file.

Path Creator is a small utility program which creates a folder structure by simply typing in the path. It is very suitable for creating folder structures many levels deep.

This program is Freeware, it was created by:

Granite Mountain Software
3515 S. Myrtle St.
Spokane, WA 99223

reboot

REBOOT is a command line executable that will reboot the Windows NT operating system.

Filename: *reboot.exe*

Syntax

REBOOT

Command line executable for rebooting the Windows NT operating system. This command is helpful in batch or automation processes.

Warning

The command does not have a confirmation line or dialog box, it will immediately begin reboot upon execution.

robocopy

Robocopy is a 32-bit command-line tool used for file replication. This tool helps maintain identical copies of a directory structure on a single computer or in separate network locations. Robocopy is included in the *Microsoft® Windows® Resource Kit*.

IMPORTANT:

Robocopy version XP010 requires Microsoft® Windows® Server 2003, Microsoft® Windows® XP, Microsoft® Windows® 2000, or Microsoft® Windows NT® version 4.0. or later.

Robocopy is a very robust executable and has many features. To learn about the features see the word document robocopy.doc in the folder that contains the exe.

SetEnv

Version 1.00

Copyright © 2005 Jonathan Wilkes

Filename: *setenv.exe*

Allows you to set/update/delete a System Environment Variable, e.g. PATH For Windows 9x/NT/2000/XP/S2K3

Usage: SetEnv -(options) <name> <value>

Options:

-a name value : set the variable to the specified value
-a name %value : add the value to an expanded variable
-d name : delete the variable
-d name %value : delete the value from the expanded variable

Return Values:

0		Success
5	Access	Denied
1	Other Error (Error messages go to stderr)	

Notes:

If you want to create an expanded variable with multiple valuse, e.g. PATH specify the value with a preceeding % character, e.g. SetEnv PATH %d:\Bin

Use double quotes around any value which contains a space.

Under more modern (i.e. proper) operating systems, such as Windows 2000, XP and Windows 2003 Server, environment variables are stored in the registry under the following key:

```
HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\Session Manager\Environment
```

Variables are added by creating a new value under this key, or by modifying a value if it already exists. To delete a variable, we simply delete its registry value, unless we are removing part of an expanded value, such as **PATH** in which case we only remove the part we want.

At this point Windows will not be aware of our changes unless we log off or reboot. To get around this, SetEnv will broadcast a WM_SETTINGCHANGE to all of the windows in the system. This allows other running applications, e.g. *Explorer.exe*, to be notified of our change.

Broadcasting this message results in a slight delay (whilst the open windows process it) of around 2/3 seconds, so it may appear that SetEnv has hung, this is not the case.

Examples:

Creating a variable

SetEnv can create two types of variables, a simple one that has only a single value such as:

```
InstallPath = C:\Program Files\Xanya\_Bin
```

or more complex variables with multiple values, a good example of this is the **PATH** variable:

```
PATH = C:\WINDOWS\system32;C:\WINDOWS;C:\Program Files\Xanya\_Bin
```

To create a simple variable, just enter in the following command line, obviously substituting your own variable name and value:

```
SetEnv -a InstallPath "C:\Program Files\Xanya\_Bin"
```

Similarly, to add a variable with multiple values, you need to type the following command line for each value ensuring you prefix the value with the % character:

```
SetEnv -a name %value
```

Example:

```
SetEnv -a PATH %"C:\Program Files\Xanya\_Bin  
SetEnv -a PATH %"C:\Bin
```

Modifying an existing variable

You modify variables in exactly the same way in which you would create them. If you are modifying a multi-value variable and you forget the % prefix to the value, then SetEnv will automatically detect the destination has multiple values and will modify it correctly.

Deleting a variable

To delete a variable, specify the **-d** option instead of the **-a** option as in the following example:

```
SetEnv -d InstallPath
```

To delete a value from a multi-value variable you simply enter the following, specifying the value to remove.

```
SetEnv -d PATH %"C:\Program Files\Xanya\_Bin
```

As with modifying a multi-value variable if you forget to specify the % prefix, then SetEnv will automatically work this out and delete the specified value only.

showmem

Command creates a Box in the TASK BAR that show the current amount of memory being used.

Filename: *showmem.exe*

Syntax

```
showmem
```

The command is started by executing *showmem.exe*. A item is added to the Task Bar that shows how much memory (in megabytes) that is being used at any one instance. It dynamically changes, as the memory resources are used.

The application can be placed in you STARTUP, if you want it to start every time you logon.

To deactivate you can Right-Click on the item in the Task Bar, and select CLOSE. You can also stop the application using the Task Manager.

shrsec

Command to share resources from the command line.

Filename: *shrsec.exe*

Syntax

SHRSEC sharename trustee [/noaccess | /revoke | /read | /change | /full]

shutdown

SHUTDOWN is a command line executable that will do a Windows NT Shutdown.

Filename: *shutdown.exe*

Syntax

SHUTDOWN

Command line executable for doing a Windows NT Shutdown. This command is helpful in batch or automation processes.

Warning

The command does not have a confirmation line or dialog box, it will immediately begin shutdown upon execution.

sp

Type in: **sp**

Function: Change the DOS prompt string to display the node name and current working directory.

Filename: *sp.bat*

Substitution for the command: prompt %computername%\$s\$p\$g\$

Note: This is a quick way for a user to find out what his computer name is!!!

triangle

Triangle Calculator

Files included

=====

Triangle.exe 369,152 bytes

Triangle.hlp 7,979 bytes

Triangle.txt 838 bytes

This program is Freeware. It may be freely distributed.

This program will solve triangles from the following information:

- 1) All three sides
- 2) Two sides and a corresponding angle.
- 3) Two angles and a corresponding side.

Once you provide the information, the program calculates the remaining sides and/or angles, area, and height.

No installation is required, just copy the included files to a directory of your choice. Double click the "Triangle.exe" file to run the program.

You may contact the author of this program via email at: web_mail@rmonet.com or you may visit my web site at: <http://www.rmonet.com/programs.html>

Bug alert! - The program does not always calculate SSA triangles correctly when an angle is 90 degrees or greater.

Example: Enter side A 10, Side B 10 and angle a 96.

The resulting angles add up to very slightly more than 180, but this just seems to be rounding errors.

Just be suspicious if a measurement comes up 1.97418023001778E-14

This program was written with Delphi 5.

-Robert Orndorff

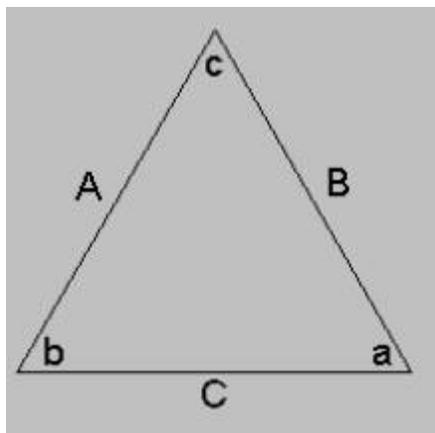
Triangle Help

This program will solve almost any triangle. You provide one of the combinations of sides and/or angles and this program does the rest. It will calculate the missing sides and angles and also calculate height

and area. The height is calculated according to the base you have selected. If the triangle is a right triangle, then the program picks the base for you.

The screenshot shows a software window titled "Triangle" with a menu bar containing "File" and "Help". The interface includes several input fields and control elements:

- Input fields for **Side A**, **Side B**, and **Side C** (bold labels).
- Input fields for **Angle a**, **Angle b**, and **Angle c** (bold labels).
- A "Base" section with radio buttons for **Base A**, **Base B**, and **Base C** (bold labels).
- A "Triangle" section with radio buttons for **SSS**, **SSA**, and **SAA** (bold labels).
- Buttons for **Calculate**, **Clear**, and **Exit** (bold labels).
- Output fields for **Area** and **Height** (bold labels).
- A text area for instructions: "Enter: Side A, Side B, Side C".



To solve a triangle:

Click the button corresponding to the information you have.

Click SSS if you have all three sides. (Sides A, B, and C)

-Click SSA if you have two sides and one angle. (Sides A and B and Angle a)

-Click SAA if you have one side and two angles. (Side A and Angles A and B)

Fill in the appropriate blanks and press the "Calculate" button and the remaining information is filled in.

The required fields have bold labels. Therefore, the non-bold fields are calculated.

Angles need to be entered in degrees.

xcaccls

Purpose

XCACLS.EXE displays or modifies access control lists (ACLs) of files and directories.

Version

Microsoft (R) Windows Script Host Version 5.6

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Usage

Displays or modifies access control lists (ACLs) of files & directories)

```
XCACLS filename [/T] [/E] [/G user:perm;spec] [...] [/R user [...]]
  [/P user:perm;spec [...]] [/D user:perm;spec] [...]
  [/O user] [/I ENABLE/COPY/REMOVE]
  [/L filename] [/Q] [/DEBUG]
```

filename [Required] If used alone, it Displays ACLs.(Filename can be a filename, directory name or wildcard characters and can include the entire path. If path is missing, it's assumed to be under the current directory.)

Notes:

- Put filename in quotes if it has spaces or special characters such as &, \$, #, etc.
- If Filename is a directory, all files and sub directories under it will NOT be changed unless the /A is present.

/A [Used only with a Directory] This will change all child items under the inputted directory but will NOT traverse sub directories unless /T is also present. If filename is a directory, and /A is not used, no files will be touched.

/T Traverses each subdirectory and makes the same changes. This switch will traverse directories only if the filename is a directory or is using wildcards.

/E Edit ACL instead of replacing it.

/G user:GUI Grant security permissions similar to Windows GUI standard (non-advanced) choices.

/G user:Perm;Spec Grant specified user access rights.

(/G adds to existing rights for user)

User: If User has spaces in it, surround it in Quotes If User contains #machine#, it will replace #machine# with the actual machine name if its a non-domain controller, and replace it with the actual domain

name if it is a domain controller.

GUI: Is for standard rights and can be:

Permissions...

F Full control

M Modify

X read & eXecute

L List folder contents

R Read

W Write

Note: If a ; is present, this will be considered a Perm;Spec parameter pair

Perm: Is for "Files Only" and can be:

Permissions...

F Full control

M Modify

X read & eXecute

R Read

W Write

Advanced...

D Take Ownership

C Change Permissions

B Read Permissions

A Delete

9 Write Attributes

8 Read Attributes

7 Delete Subfolders and Files

6 Traverse Folder / Execute File

5 Write Extended Attributes

4 Read Extended Attributes

3 Create Folders / Append Data

2 Create Files / Write Data

1 List Folder / Read Data

Spec is for "Folder and Subfolders only" and has the same choices as Perm.

/R user Revoke specified user's access rights. (Will remove any Allowed or Denied ACL's for user)

/P user:GUI Replace security permissions similar to standard choices

/P user:perm;spec Replace specified user's access rights. For access right specification see /G option

(/P acts like /G if there are no rights set for user)

/D user:GUI Deny security permissions similar to standard choices.

/D user:perm;spec Deny specified user access rights. For access right specification see /G option

(/D adds to existing rights for user)

/O user Change the Ownership to this user or group.

/I switch Inheritance flag, if omitted default is to not touch Inherited ACL's. Switch can be:
ENABLE - This will turn on the Inheritance Flag if its not on already.
COPY - This will turn off the Inheritance flag and copy the Inherited ACL's into Effective ACL's
REMOVE - This will turn off the Inheritance flag and will not copy the Inherited
ACL's, this is the opposite of ENABLE If switch is not present, /I will be ignored and Inherited ACL's will remain untouched.

/L filename Filename for Logging. This can include a path name if the file isn't under the current directory.
File will be appended to, or created if it doesn't exist. Must be Text file if it exists or error will occur. If filename is omitted the default name of XCACLS will be used.

/Q Turn on Quiet mode, it's off by default. If it's turned on, there will be no display to the screen.

/DEBUG Turn on Debug mode, it's off by default. If it's turned on, there will be more information displayed and/or logged. Information will show Sub/Function Enter and Exit as well as other important information.

/SERVER servername Enter a remote server to run script against.

/USER username Enter Username to impersonate for Remote Connections (Requires PASS switch) - Will be ignored if its for a Local Connection.

/PASS password Enter Password to go with USER switch (Requires USER switch)

Wildcards can be used to specify more than one file in a command.

Such as:

* Any string of zero or more characters

? Any single character

You can specify more than one user in a command.

You can combine access rights.