

Contents

Cone Info & Licence Manager..... 6

CAD Configuration..... 9

Sign Search/Browse/Insert..... 21

7202.1 Wicket Signs..... 40

7243 Lane Configurator 43

7202/7244/7245 Signs - 7244 Destinations..... 49

7202/7244/7245 Signs - 7244 Restrictions..... 58

7202/7244/7245 Signs - 7245 Lane Alignments..... 64

7202/7244/7245 Signs - 7245 Junctions 70

Custom Schedule 13.9 Signs - Fixed Plate Size: Single Panel 77

Custom Schedule 13.9 Signs - Fixed Plate Size: Double Panel..... 91

Custom Schedule 13.9 Signs - Fixed Plate Size: Triple Panel..... 105

Custom Schedule 13.9 Signs - Fixed Plate Size: Flag Type 119

Custom Schedule 13.9 Signs - Fixed Plate Size: Dedicated Lanes..... 132

Custom Schedule 13.9 Signs - Variable Plate Size: Single & Flag Type 142

Custom Schedule 13.9 Signs - Variable Plate Size: Double Panel Type..... 154

Sign Arrays - Single Carriageway Arrays 165

Sign Arrays - Dual Carriageway Arrays..... 191

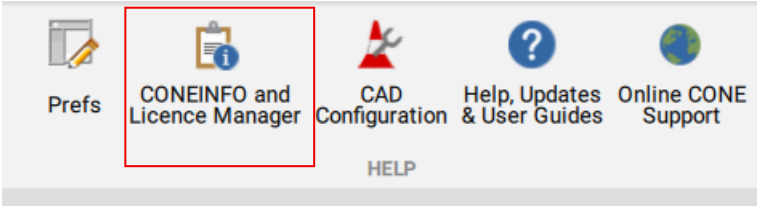
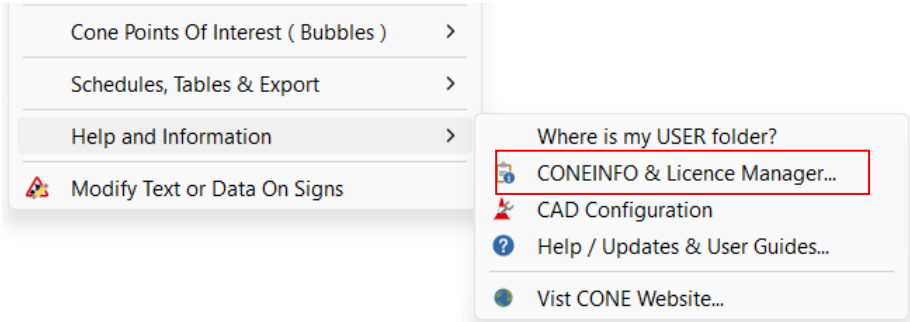
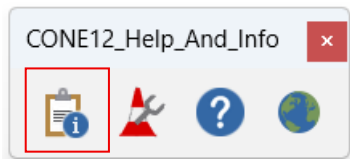
Sign Arrays - Select Last Sign Array	221
Frequently Used Signs - Triangular.....	223
Frequently Used Signs - Circular.....	224
Frequent Signs - Rectangular Signs.....	226
Frequent Signs - Combination Signs	228
Frequent Signs - Diversion Signs	230
Frequent Signs - Diverted Traffic Signs.....	231
Sign & Leader Tools - Modify Text or Data On Signs.....	233
Sign & Leader Tools - Dog Leg or Stretch a Leader	236
Sign & Leaders Tool - Insert Sign Symbol & Leader. Connect to Sign(s).....	240
Sign & Leader Tools - Insert Sign Symbol & Leader. Point to Sign	242
Sign & Leader Tools - Insert Sign Symbol	245
Sign & Leader Tools - Label Single Sign	247
Sign & Leader Tools - Label Multiple Signs	249
Sign & Leader Tools - Replace Old Signs with v11+ Style.....	252
Sign & Leader Tools - Sign or Block Swap	255
Sign & Leader Tools - Sign or Block Swap All Like	259
Sign & Leader Tools - Copy Sign Symbol	261
Sign & Leader Tools - Copy Sign Symbol & Create Leader.....	264
Sign & Leader Tools - Query Sign.....	267

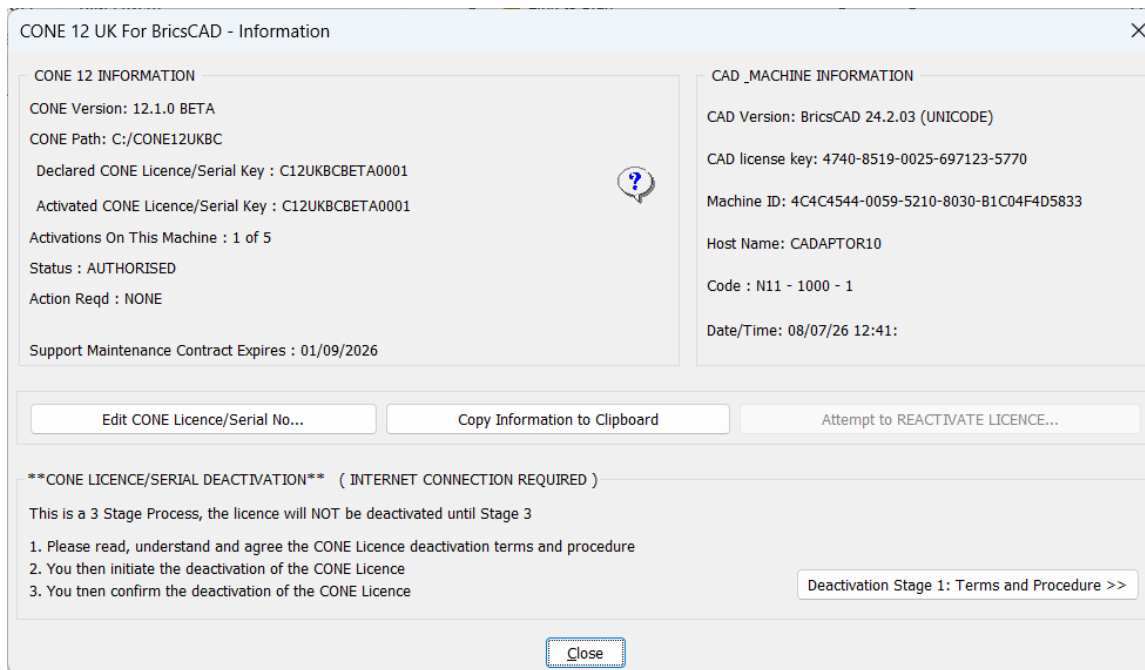
Sign & Leader Tools - Export Custom Sign to Custom Folder	270
Devices Along a Curve	274
Work Zone Tools – Working Zone Wizard	279
Work Zone Tools – Working Space Area Hatch	291
Work Zone Tools – Select Last Work Zone	296
Symbols	298
Introduction to Schematic Segments & Layouts	300
Schematic Diagrams - Basic Roads & Junctions.....	303
Schematic Diagrams - Single Carriageway Wizard.....	307
Schematic Diagrams - Dual Carriageway Wizard	311
Schematic Diagrams - TSAM Wizard	314
Schematic Diagrams - Road Closures.....	319
Miscellaneous Tools & Libraries – Chapter 8 Details	322
Miscellaneous Tools & Libraries – Linear Devices.....	325
Schedules Tables & Export - Simple Quantified Sign Schedule	328
Schedules Tables & Export - Advanced Quantified Sign Schedule.....	334
Schedules Tables & Export - Advanced Individual Sign Schedule	353
Schedules Tables & Export - Device Count Tables - Cone Count.....	375
Schedules Tables & Export - Device Count Tables - Barrier Count	378
Schedules Tables & Export - Device Count Tables - Stud Count.....	381

Schedules Tables & Export - Bubble Tables.....	385
Schedules Tables & Export - Traffic Signal Phase Tables	390
Schedules Tables & Export - Export Custom Sign to Custom Folder	395
Schedules Tables & Export - Convert Sign to PDF.....	400
Schedules Tables & Export - Convert Multiple Signs to PDF.....	402
Miscellaneous Tools & Libraries – Toggle Sign Colour	408
Miscellaneous Tools & Libraries – Purge All UnReferenced Blocks	411
Miscellaneous Tools & Libraries – Group Select ON/OFF	413
Miscellaneous Tools & Libraries – Group Select ON/OFF	415
Miscellaneous Tools & Libraries – Cone Layout Tab Manager	417
Miscellaneous Tools & Libraries – Cone BIM Layer Tool	422
Curve Tools - Reverse Curve Direction	427
Curve Tools - Create Marker Lines	429
Curve Tools - Offset Tapers	434
Curve Tools - Draw Distance Marker Posts	438
Curve Tools - Draw a Regular Ruler	443
Curve Tools - Draw a Irregular Ruler.....	448
Curve Tools - Dynamic Measure & Mark.....	452
Curve Tools - Attempt to End Join Multiple Entities.....	455
Curve Tools - Get Min. Distance Between 2 Curves	457

Curve Tools - Get Distance Between 2 points on a Curve.....	461
Curve Tools - Create Polyline Between 2 points on a Curve	463
Curve Tools - Break Between 2 points on a Curve.....	466
Curve Tools - Trim Between 2 points on a Curve.....	470
Curve Tools - Offset Between 2 points on a Curve	473
Curve Tools - Dimension Between 2 points on a Curve	477
Cone Points of Interest (Bubbles) - Insert Current Bubble	481
Cone Points of Interest (Bubbles) - Insert Current Bubble with LEADER.....	483
Cone Points of Interest (Bubbles) - Associate Bubble to Sign.....	485
Cone Points of Interest (Bubbles) - Bubble Manager	488
Roadway Tools – Create Roadway.....	495
Roadway Tools – Intersection Clean.....	503
Roadway Tools – Intersection Break	507
Roadway Tools – Dynamic Fillet with Trim.....	510
Roadway Tools – Dynamic Fillet No Trim.....	513

Cone Info & Licence Manager

Command: CONE12INFO RIBBON: CONE12 Misc: HELP	 The ribbon menu contains five icons: 'Prefs' (notepad and pencil), 'CONEINFO and Licence Manager' (clipboard with 'i'), 'CAD Configuration' (wrench), 'Help, Updates & User Guides' (question mark), and 'Online CONE Support' (globe). The 'CONEINFO and Licence Manager' icon is highlighted with a red rectangular box. Below the icons is a 'HELP' button.
CONE12UKBC Pull Down Menu	 The pull-down menu lists four options: 'Cone Points Of Interest (Bubbles)', 'Schedules, Tables & Export', 'Help and Information', and 'Modify Text or Data On Signs'. The 'Help and Information' option is expanded, showing a sub-menu with four items: 'Where is my USER folder?', 'CONEINFO & Licence Manager...', 'CAD Configuration', and 'Help / Updates & User Guides...'. The 'CONEINFO & Licence Manager...' option is highlighted with a red rectangular box.
TOOLBAR: CONE12_UK_General	 The toolbar is titled 'CONE12_Help_And_Info' and contains four icons: 'CONEINFO and Licence Manager' (clipboard with 'i'), 'CAD Configuration' (wrench), 'Help, Updates & User Guides' (question mark), and 'Online CONE Support' (globe). The 'CONEINFO and Licence Manager' icon is highlighted with a red rectangular box.



The CONE Info and Licence Manager displays information about your current CONE version, serial number, activations on the current machine, Licence status, any action required and when your Support Maintenance contract expires.

Useful information about you current machine and CAD version is also displayed

This information is very useful to us when providing Technical Support

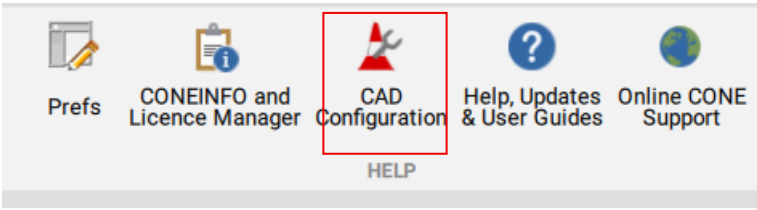
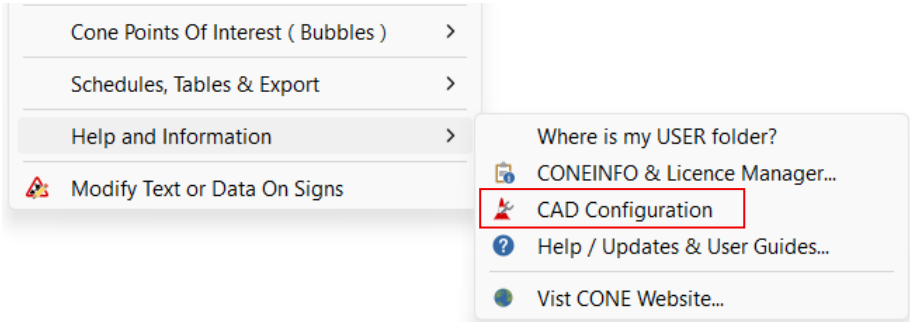
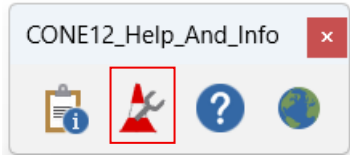
You can deactivate the licence on this, your current machine for the purposes of activating on another machine (Internet Access required). Activation on another machines is not possible without deactivating first

Deactivation It is a three stage process and you start the process by picking the **Deactivation Stage1:Terms and Procedure** button and follow the process

We may in certain circumstances supply you with a new CONE serial number and you can, following instructions from us , change the current serial number by picking the **Edit CONE serial number** button

You can also reactivate a licence by picking the **Attempt to REACTIVATE LICENCE** button, but please note you may activate a CONE licence a maximum of five times on a particular machine

CAD Configuration

Command: CONECONFIG RIBBON: CONE12 Misc: HELP	
CONE12UKBC Pull Down Menu	
TOOLBAR: CONE12_UK_General	

Various CAD settings that users say are the most important,

have been collected into a single dialog. A quick set to recommended settings is included along with the ability to turn ALL CONE toolbars ON or OFF.

CONE/CAD Configuration

BricsCAD offers various settings to customise your interface and workspace. In this tool we have collected the specific settings that CONE users have identified as most important and labeled our recommended options accordingly.

You may select your own preferences or use the [QUICK SET ALL TO RECOMMENDED] button to initialise the settings to our recommendations

PLEASE NOTE THAT NO CHANGES WILL BE APPLIED UNTIL YOU CLICK THE [OK] BUTTON.

RECOMMENDED DRAWING UNITS (Enable CheckBox to Implement)

☐ LINEAR: Decimal,Metric,Metres. ANGULAR: Decimal,Angle Base Zero, Anticlockwise Direction

RECOMMENDED VIEW (Enable CheckBox to Implement)

☐ World Coordinates, Plan View, Zero View Twist

** Requires Model to be the current Tab **

CURRENT INTERFACE SETTINGS

Interface Theme:

☒ Dark (Recommended)
☐ Light

Model Space background Colour:

☐ Black
☒ White (Recommended)
☐ Do Not Change

Paper Space background Colour:

☐ Black
☒ White (Recommended)
☐ Do Not Change

CONE Toolbars:

☐ All On
☐ All Off
☒ Do Not Change

Toolbar & Ribbon Size:

☐ Small
☒ Large
☐ Do Not Change

Ribbon Menu:

☒ On (Recommended)
☐ Off

Pull Down Menu Bar:

☒ On (Recommended)
☐ Off

Command Line:

☒ On (Recommended)
☐ Off

Right Mouse Press (SHORTCUTMENU Setting):

☒ 19 (Recommended)
☐ Do Not Change

Status Bar:

☐ On (Recommended)
☒ Off

Nav Cube:

☐ On
☒ Off (Recommended)

UCS Icon:

☒ On (Recommended)
☐ Off

OTHER RECOMMENDED SETIINGS

3D OSMODE:

☐ On
☒ Off (Recommended)

Hatch Pattern Transparency:

☒ Zero (Recommended)
☐ Do Not Change

QUAD Tool:

☒ Off (Recommended)
☐ On

Snap Type:

☒ Grid (Recommended)
☐ Do Not Change

Snap Track:

☐ On
☒ Off (Recommended)

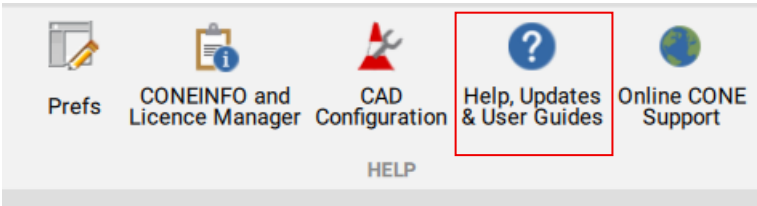
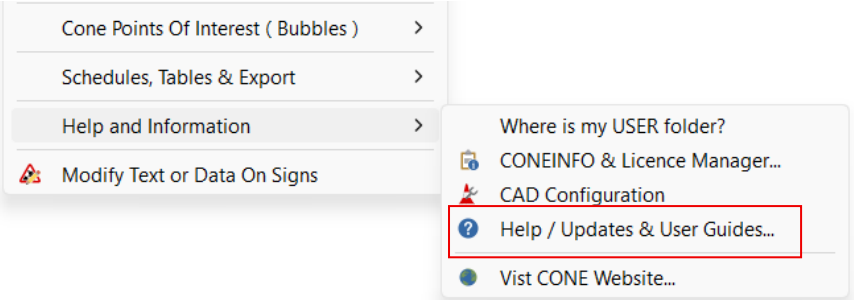
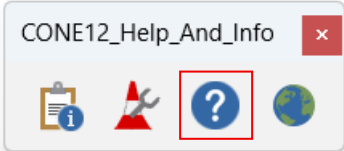
Prompt Menus:

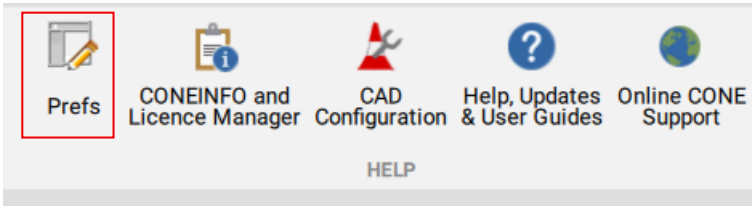
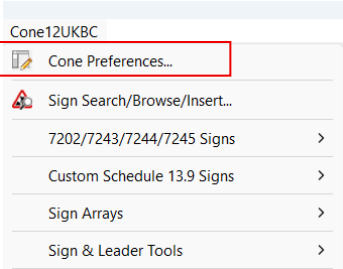
☒ Top Left (Recommended)
☐ Off
☐ Do Not Change

OK
Cancel

CONE 12 User Guide: Conesoftware.com July 7th 2026

10

Command: CONE12HELP RIBBON: CONE12 Misc: HELP	
CONE12UKBC Pull Down Menu	
TOOLBAR: CONE12_Help_And_Info	

Cone Preferences Command: CUKPREFS RIBBON: CONE12 Misc: Prefs	
CONE12UKBC Pull Down Menu	
TOOLBAR: CONE12_UK_General	

CONE 12 UK: Preferences

Global Insert Scale
 Insert Scale: 1
 This is the value that governs the insert scale of all CONE elements
 Signs, Symbols, Layouts etc (except Sign Design elements)

Preset Rotation
 Insert Rotation: 0 ☐ Prompt for Rotation
 These settings govern the way that CONE elements without special dialogs are rotated Example: Symbols, Roads and Junctions

Label Settings
 Label Prefix:
 Label Suffix:
 Label Rotation: 0
☒ Prompt for Rotation
 Label Height: 2.5
 These settings govern the way that signs are labeled. The sign reference can be optionally prefixed with the value set in Label Prefix, a Suffix can also be added
 Example: If the Prefix was P and the sign reference was 7001 the label would be P7001

Cone Leader Layer
☒ Current
☐ CONELEADER

Sign Symbol Layer
☒ Current
☐ CONELEADER

Sign Sym Scale
 Sign Sym Scale: 1
☒ Sym Scale = Sign Scale
 These settings determine the layer which CONE Leaders & Sign Symbols are assigned, + the current Sign Symbol Leader Style when using the various CONE Leader Tools > Insert Sign Symbol and Leader tools
 To change the Sign Symbol Leader Style pick the image icon

Dialogs, Lineweight, Frequent Signs, Schedule Tables
☒ Display Smaller Dialogs (Screen Heights Less Than 1080 pixels)
☒ CONE Signs Always Have Zero Lineweight
☐ Frequent Signs (Ribbon & Toolbars) use Welsh bilingual alternative

SCHEDULES & TABLES
☐ Create Tables with Primitive Objects where applicable
☒ Tables with Primitive Objects have a Background Fill
 Note: If the Background Fill option is checked then the table will be converted to a Block

Default Ref/Label & Description when creating new Schedule 13.9 Custom Signs (Fixed and Variable Plate Types)
 Ref / Label : Max 15 Characters
 Description : Max 100 Characters
 13.9
 Schedule 13-9 : Temporary Information

Dynamic Display of Distance
☒ On/Off
 Label Height: 1
☒ Auto Scale
 Colour:
☐ Snap to Nearest
☐ None ☐ 0.25 ☒ 0.5 ☐ 1.0
 CONE tools that allow picking between 2 points on a curve, Eg. Devices on a Curve, Line Marking and Cone Ruler will dynamically display a label showing distance moved from the start point
 The Label can be a fixed height or set to Auto Scale to suit the Screen Zoom Size
 The Label Colour can be changed by selecting the Colour Swatch
 Snap to nearest 0.25/0.5/1.0m or none

OK **Cancel**

Global Insert Scale

All CONE objects (signs, symbols, schematic layouts etc.) are inserted with a Global Insert Scale setting. (Note: Not including Sign Design objects and real world size objects such as Road markings and channelling devices)

Some CONE tools such as Sign Browse, Sign Arrays and Wizards allow you to change this setting within the dialog window applicable to the tool, whereas some CONE tools only have a direct file insertion tool (Symbols, Road & Junctions and Road Diversion related)

If you need to change the scale prior to inserting objects from these tools then you should change it in CONE PREFERENCES

Global Insert Scale: Default value is 1.0

Assuming you are working with a setting of 1 CAD unit = 1 metre then a Global Insert Scale setting of 1.0 is perfect when working on schematic schemes. However if you are

placing CONE objects onto maps then you may find that a insert scale of 1.0 results in signs that are too large in proportion to the map, in which case a Global Insert Scale setting of 0.5 to 0.75 is recommended. For larger area projects such as road closure diversions, the a Global Insert Scale setting of 4.0 to 5.0 is recommended.

If you are having to change the settings widely from these values, then check the size and scale of your base map or area plan, if this does not measure correctly in metres, then the tools such as Sign Arrays and Devices on a Curve may not place the items correctly on the drawing.

Note: This setting has no effect of "real world size" CONE objects such as road marking and channelling devices which are intended for use on maps and as such are created with their correct size in metres

Dialogs, Lineweight, Frequent Signs and Schedule Tables

Check boxes turn on features to help you use CONE 12

Display Smaller Dialogs:	Default value is OFF
This should be turned ON if using a screen height of less than 1080 pixels, smaller resolution screens may prevent the buttons at the bottom of the larger dialog boxes displaying and being available to click with the mouse, if using AutoCAD the dialogs will refuse to load and make the function inaccessible, checking this box will put parts of the dialog interface (usually the insert settings) into a separate sub-dialog box. The largest dialog currently is the WORKZONE WIZARD/FINALISE SIGN dialog – if these display correctly your settings are correct.	

CONE Signs Always have Zero Lineweight:	Default value is ON
Due to the way the sign text is plotted, some smaller signs may have “blurry” text or outlines, checking this box will ensure that is prevented.	
Frequent Signs Use Welsh Bilingual Alternative:	Default value is OFF
Set to ON to insert Welsh frequently used signs from the ribbon or toolbar	
Create Tables with Primitive Objects:	Default value is OFF
Users of BricsCAD v19 or earlier may have problems using the newer Sign Schedule function, turn this checkbox ON to use the older simple table entities using polylines and text rather than the newer table entity. Both options create similar looking output, the new table entities can make older copies of BricsCAD unstable	
Tables with Primitive objects have a background fill	Default value is OFF

Preset Rotation

When inserting objects you may set the default insertion rotation angle or choose to be prompted on screen for an object rotation angle after insertion.

Insert Rotation:	Default value is 0.0 degrees
If the Prompt for Rotation setting is NOT checked then CONE objects will be inserted with the rotation angle set here	
Prompt For Rotation:	Default value is NOT checked
If the Prompt for Rotation setting is checked then you will be prompted on screen for an object rotation angle after insertion of the object Some CONE tools such as Sign Browse, Sign Arrays and Single/Divided highway schematics allow you to change this setting within the dialog window applicable to the tool, whereas some CONE tools only have a direct file insertion tool (Symbols, Road & Junctions and Mobile Works) If you need to change the rotation setting prior to inserting objects from these tools then you should to change it here in CONE PREFERENCES	

Label Settings

These settings only apply to the Label Signs function and govern the way that signs are labelled

Label Prefix:	Default value is blank
If you enter a prefix value here (example P) then labels will be prefixed with this value	

Example: The sign reference 7001 would be labelled P7001

Label Suffix:

Default value is blank

If you enter a suffix value here (example _XYZ) then labels will be prefixed with this value

Example: The sign reference 7001 would be labelled 7001_XYZ

Label Rotation:

Default value is 0.0 degrees

If the Prompt for Rotation setting is NOT checked then labels will be inserted with the rotation angle set here

Prompt For Rotation:

Default value is NOT checked

If the Prompt for Rotation setting is checked then you will be prompted on screen for a label rotation angle after insertion of the label

Label Height:

Default value is 2.5 units

The value entered here sets the size of the text label

CONE Layers

When inserting certain CONE elements you have the option to use the current drawing layer you have selected or use a program selected one.

Cone Leader Layer:	Default value is Current Layer
The Cone Leader Layer can be set to either Current or CONELEADER	
Cone Symbol Layer:	Default value is Current Layer
The Cone Symbol Layer can be set to either Current or CONELEADER	

Schedule 13.9 Labels & Descriptions

When using the Custom Fixed Size and Custom Variable Size tools, to create sign that are non standard, the default sign Reference Label and Description can be entered and saved here. These two values are used both when using the Sign Labelling functions and when generating a sign schedule

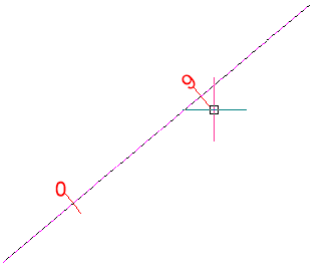
Reference / Label:	Default value is "13.9"
The Reference can be any text, up to a limit of 15 characters	
Sign Description:	Default value is "Schedule 13-9 : Temporary Information"

The Sign Description can be any text up to a limit of 100 characters

Note: These two text references/labels can be changed as required when creating individual signs from options in the dialogs

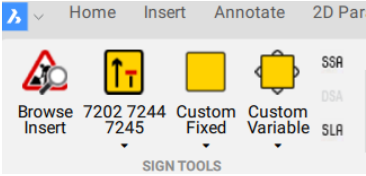
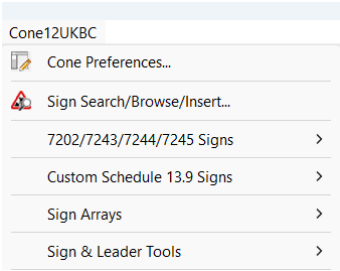
Dynamic Display of Distance

When using various CONE 12 tools, Device on a Curve, Rulers etc, you can have the distances from the datum point displayed dynamically on the screen as you move the cursor.

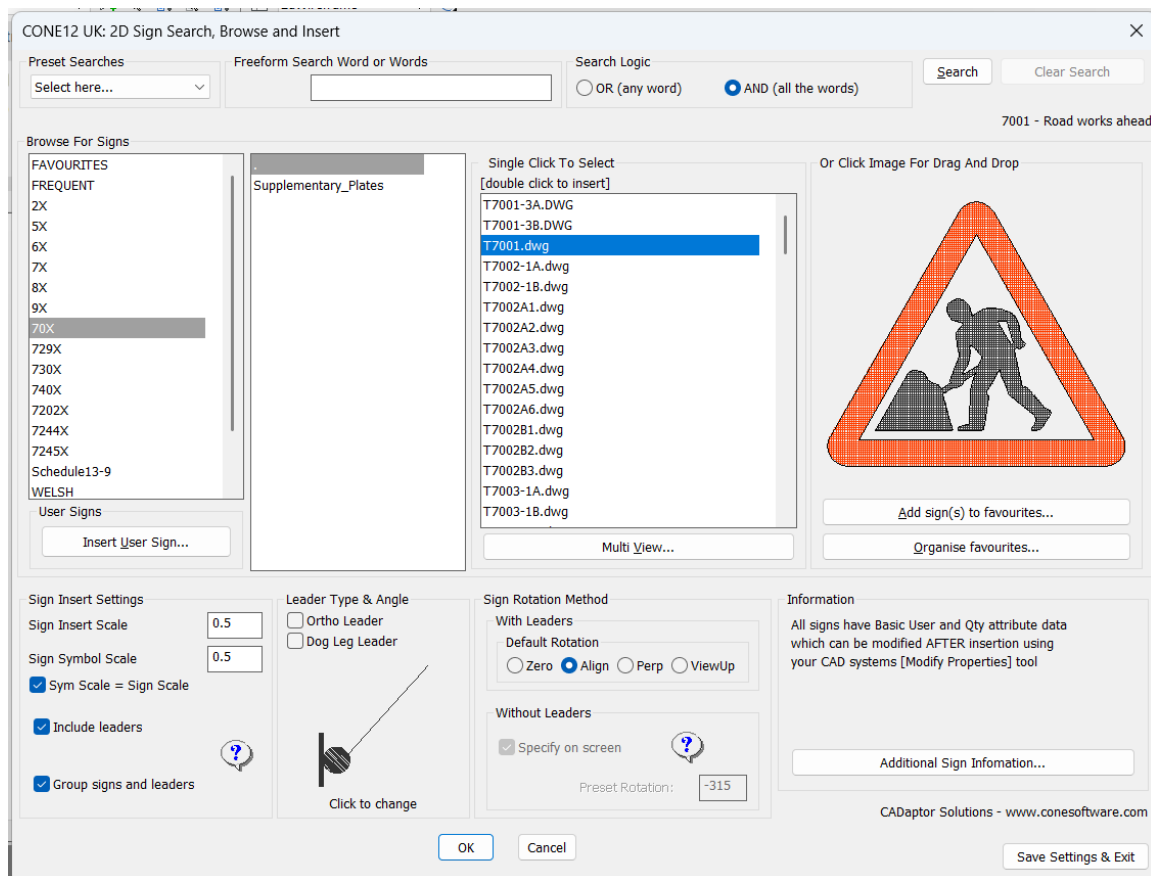
Dynamic Display of Distance:	Default value is ON
Turn the feature ON or OFF using this check box	
Label Height:	Default value is 1
Set the size of the text on screen can be independent of the zoomed scale of the current drawing view, see next setting item	
	

Auto Scale:	Default value is ON
Turn the feature ON or OFF using this check box, ON will remain at a constant height regardless of the drawing view scale, OFF will make the distance display as a standard height on the drawing	
Colour:	Default value is RED
Set the size of the colour of the displayed distance on screen, the default “red” works well with both light & dark interfaces	
Snap to Nearest:	Default value is 0.5
Set the default distance jumps the cursor will move, other values can be easily selected by typing at the command prompt when inserting devices on the drawing. The value can be selected from the radio buttons NONE, 0.25, 0.5 & 1.0 these can be assumed to be in units of metres provided your base map has been drawn in metres. Note: To save any setting made within this dialog, click the OK button, pressing CANCEL or using the red cross at top right of the dialog will not save the values to the default file C:\USERS\XXXXXXXXXX	

Sign Search/Browse/Insert

Command: CUKSBROWSE RIBBON: CONE12 Main: SIGN TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR: CONE12_UK_Sign Tools	

The primary task of the Sign Search Browse and Insert tool is to enable easy insertion of signs into the current drawing. The main dialog contains many features which are detailed below.

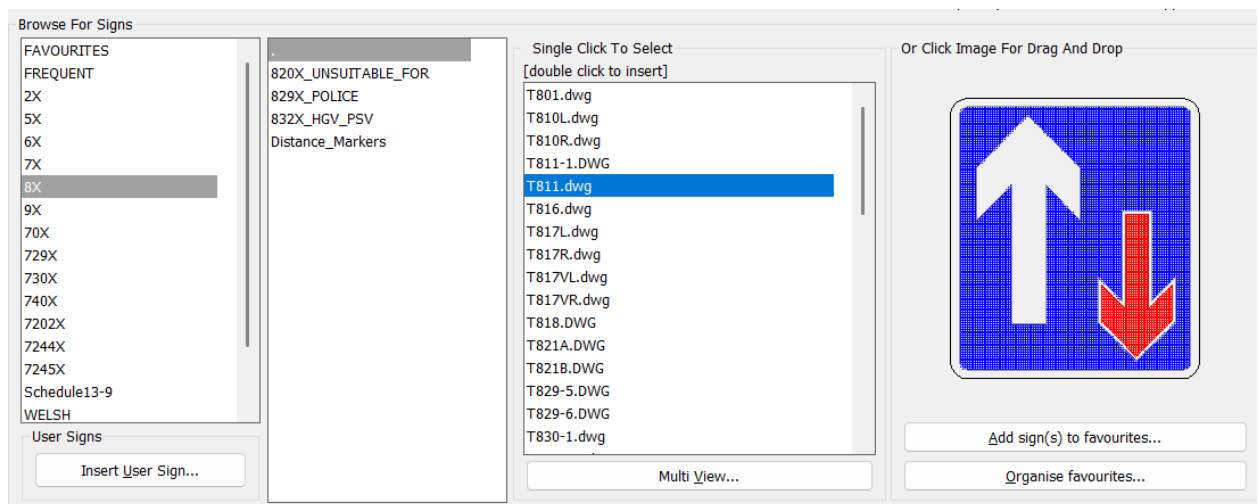


Browse For Signs

Working from left to right there are three list boxes used for sign browsing and selection
The left hand list contains the top level categories thus:

FAVOURITES	The categories (folders) 2X, 5X, 6X etc refer to the TSRGD working drawing sign names beginning with 2, 5, 6, etc. Selection of a topic from this list will in some instances change the contents of the second list box
FREQUENT	
2X	Example: If you select 8X (signs beginning with number 8) the second list box will change to:
5X	
6X	
7X	
8X	
9X	820X_UNSUITABLE_FOR
70X	829X_POLICE
729X	832_HGV_PSV

730X	Distance Markers and automatically fills in the third list box with a list of signs from the first topic of the second list box
740X	
7202X	
7244X	
7245X	
Schedule 13-9	
WELSH	
CUSTOM_SIGNS	
86X87X	



The third list box contains the list of signs contained in that folder. Note that CONE 12 signs stored on your hard drive have a capital T prefix (example T7001) this is to distinguish CONE 12 signs from older CONE signs

You can navigate through this list by single clicking on each sign, or by use of the Up and Down arrow keys or you can use your mouse scroll wheel

As each sign in the list is selected an image preview of the sign and any related data will be presented and set current ready for insertion

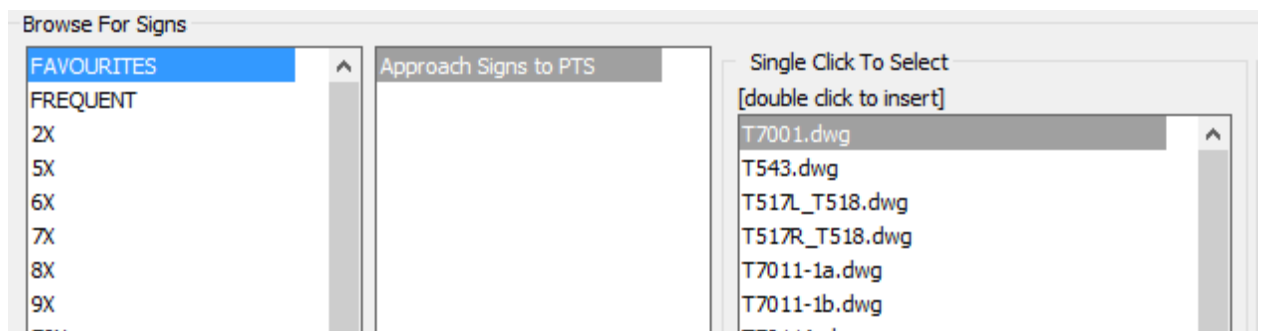
There are three ways of inserting a single sign

1. Select the OK button
2. Double click the file name in the third list box
3. Single or double click the image of the sign (in this case the Dialog is reloaded after completion of the sign insertion)

FAVOURITES FOLDER

Up to 15 virtual folders (Favourites) are supported.

The Favourites folder "Approach Signs to PTS" (short for Portable Traffic Signals) is automatically added when CONE is first installed



The Favourites tool is a simple method that allows you to organise the location of any CONE signs to your own personal favourites folder

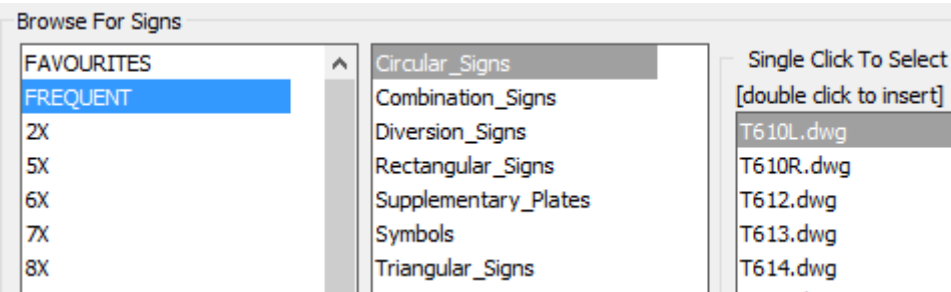
See [Add Sign To Favourites and Organise Favourites](#) for more information

FREQUENT FOLDER

The Frequent folder contains a list of signs that are frequently used, organised by sign shape and type

When you select the FREQUENT folder a sub folder is displayed in the second list box, categorised mainly by sign shape, these frequent signs are also available directly if using the Ribbon Bar and Toolbar interfaces.

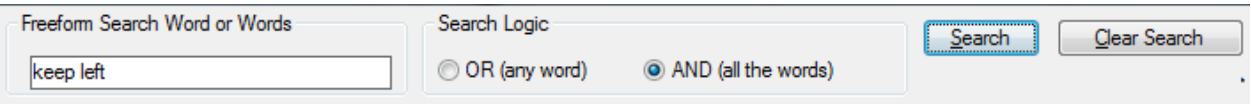
Select a folder from the second list box to view then select the signs in the third list box



Search for a Sign

	Preset Searches Contains a list of preset search topics, simply select a topic from the list and the program will perform a search on the selected topic

Freeform Search Word or Words



Enter a search phrase in the edit box and press the enter key or pick the Search button

Search Logic

How the program performs the search depends on the setting of Search Logic

OR (any word)

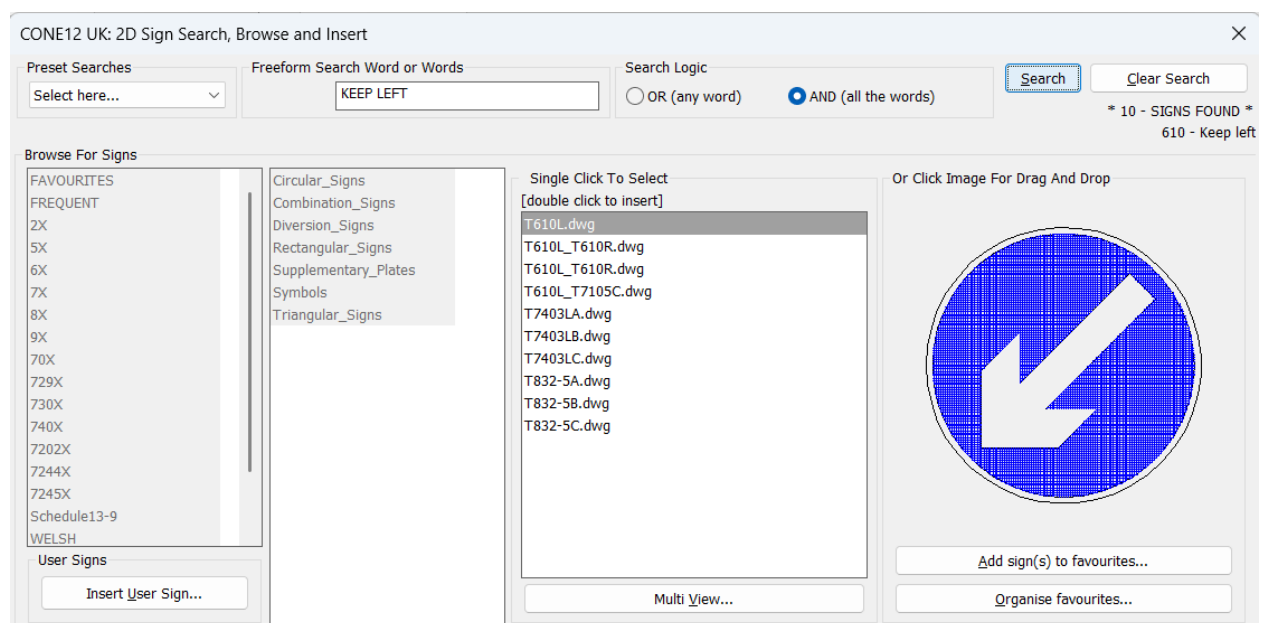
If you enter: *Keep left* in the search phrase box and the search logic is set to *OR (any word)* the program will return a long list of signs that contain the words: *Keep* or *Left*

Example: Side Road Left or No Left Turn

AND (all the words)

If you enter: *Keep left* in the search phrase box and the search logic is set to *AND (all the words)* the program will only return list of signs that contain both of the words *Keep* and *Left*

Results of a search on “keep left”



Clear Search

After searching and inserting a sign, when selecting the Sign Search/Browse/Insert dialog, the program will re-display the last active search, pick this button to clear the current search and return to normal browsing

Select and Insert a Single Sign

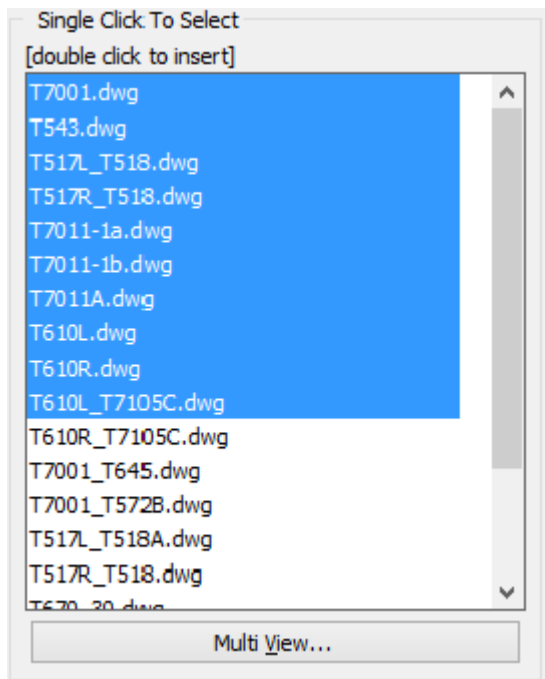
There are three ways of inserting a single sign

2. Select the OK button
3. Double click the file name in the third list box
4. Single or double click the image of the sign (in this case the Dialog is reloaded after completion of the sign insertion)

Select and Insert Multiple Signs

To select and insert multiple signs hold down the *Shift* key whilst selecting signs from the third list box or select a sign and drag up or down.

Press the OK button



Note: For multiple sign insertion, any leader settings are ignored and the signs are inserted at the current scale setting and with a zero rotation angle. You are notified of this (just in case you multiple selected by mistake) and given the option to cancel the action. Follow the prompts at the Command Line to position the group of signs

Multi View

The Multi View option provides an alternative method of sign selection and insertion



Picking the *Multi View* button will display all the signs listed in the third list box in a separate dialog (8 per page)

Use the *Next >* and *< Previous* buttons in the Multi View dialog to navigate through the list

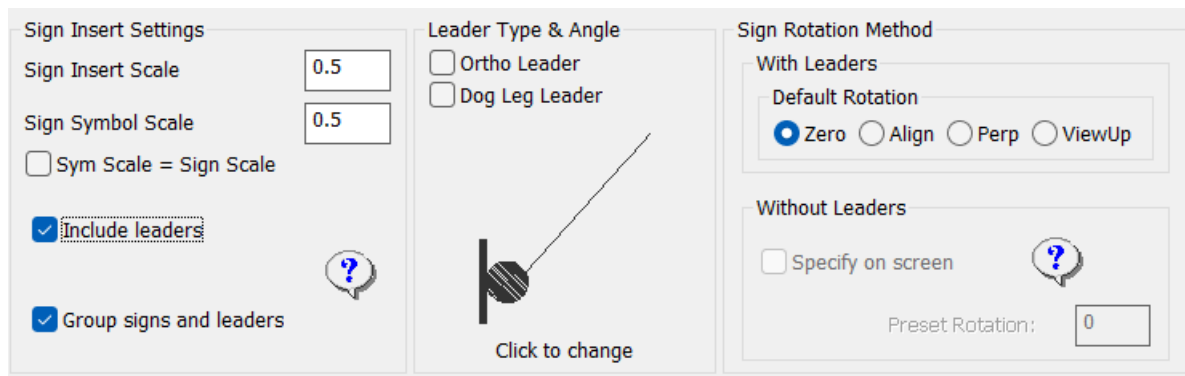
To insert a sign, first select a sign by clicking its image and then pick the *Insert* button

To select a sign and make it current, click its image and pick the *OK* button, the sign selected will now be the current sign in the main dialog window after you press the *OK* button

You can return to the main dialog window without doing either of the above by picking the *Cancel* button

Sign Insertion Methods

How signs are inserted onto the drawing depends on the following settings:



Sign Insert Settings, Leader Type and Sign Rotation Method

Sign Insert Settings

Sign Insert Scale: (This is the same value as Global Insert Scale in PREFERENCES)

This setting defines the scale of the Sign

Assuming you are working with a setting of 1 CAD unit = 1 metre then a Insert Scale setting of 1.0 is perfect when working on schematic schemes

However if you are placing signs onto maps then you may find that an insert scale of 1.0 results in signs that are too large in proportion to the map, in which case an insert setting of 0.5 to 0.75 is recommended.

Sign Symbol Scale:

The scale of the Sign Symbol can be different to the Sign Insert Scale

Sym Scale = Sign Scale

If this setting is checked then the Sign scale and the Sign Symbol scale are always the same

Include Leaders

If the *Include Leaders* checkbox is checked then the sign symbol as shown in Leader Type will be inserted first and the sequence is as follows:

The sign symbol is inserted onto the drawing and you are prompted to:

Pick symbol insert point (pick the symbol insert point)

The next prompt asks you for a:

Rotation Angle: (Enter an angle or show the angle by picking)

The sign will now be inserted and a leader line will connect to the sign symbol, the prompt will now show either

Pick sign insert point or enter keyword - Align/Perp/Zero/Rotate/View-up:[A/P/Z/R/V]

Toggles:Ortho/Dogleg [O/D] :

Option Keywords

ALIGN: Key A or a (the sign will be aligned parallel to the sign symbol)

PERP: Key P or p (the sign will be aligned perpendicular to the sign symbol)

ZERO: Key Z or z (the sign will be placed upright with respects to the WCS (zero rotation))

ROTATE: Key R or r (you will be prompted to rotate the sign manually)

VIEWUP: Key V or v (the sign will be placed upright with respect to current view)

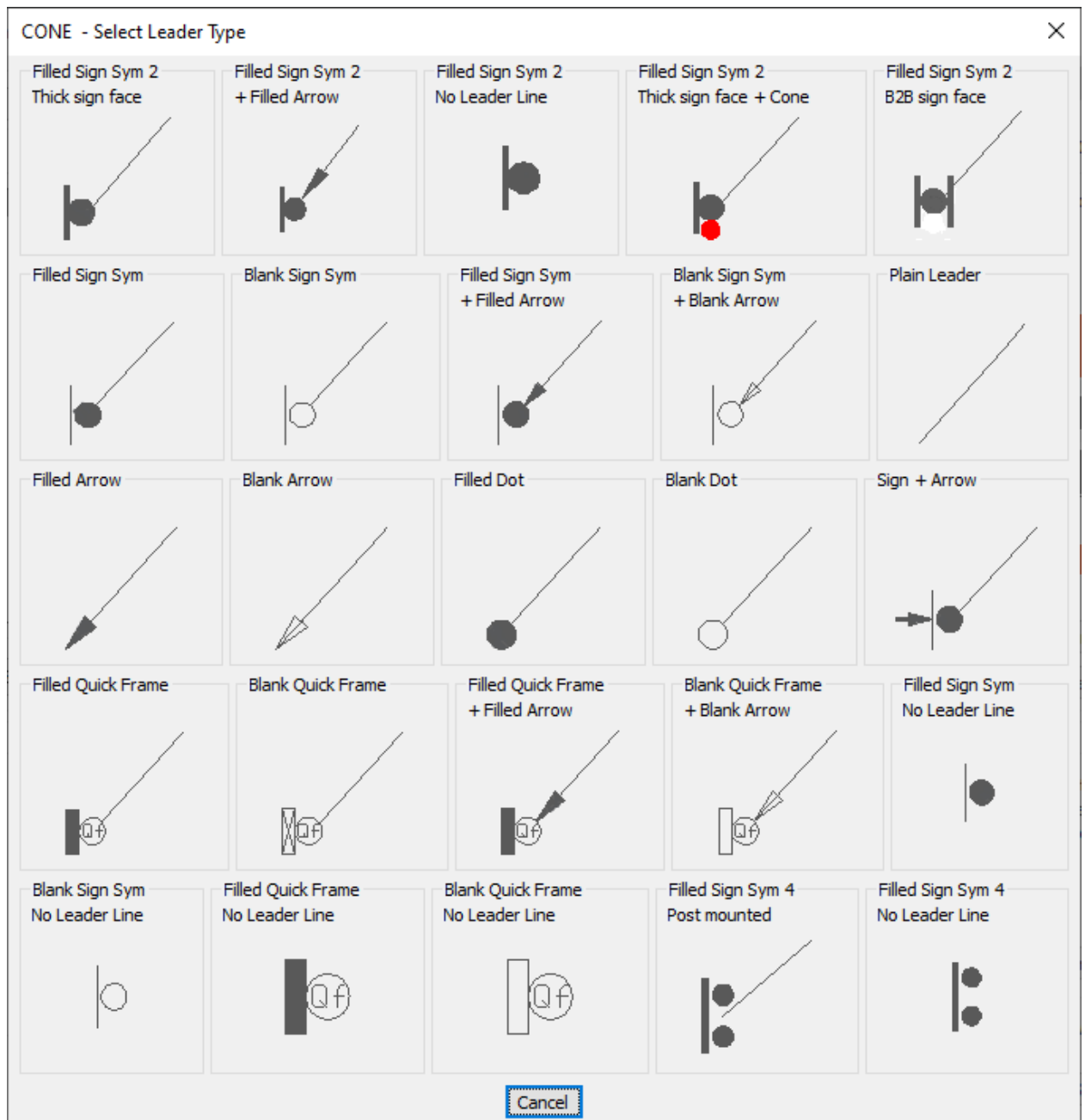
ORTHO: Key O or o, (toggles Sign ORTHO ON or OFF)

DOGLEG: Key D or d, (toggles Doglegging of the leader ON or OFF)

Group Signs and Leaders

If the *Group signs and leaders* checkbox is checked then the sign symbol, leader and sign will be grouped together, making it easier to modify all three elements together.

Note: The group selection setting can be turned ON/OFF using the Grouping options in the Miscellaneous menus or ribbon bar sections, or the CTRL & H keyboard shortcut.

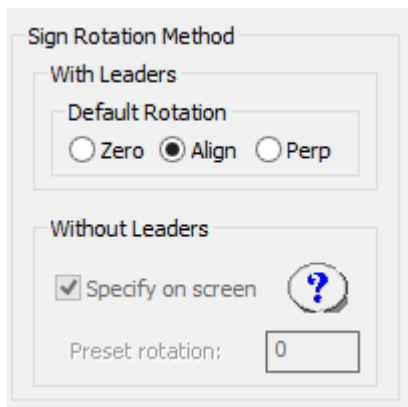


Leader Type

The Leader type image is only active if the:

Include leaders checkbox is checked.

You can change the current leader setting by clicking the leader image and selecting a leader type from the dialog that will be displayed



Sign Rotation Method

If *Include Leaders* is enabled (checked) then the Sign alignment default can be set to either Zero, Align or Perpendicular

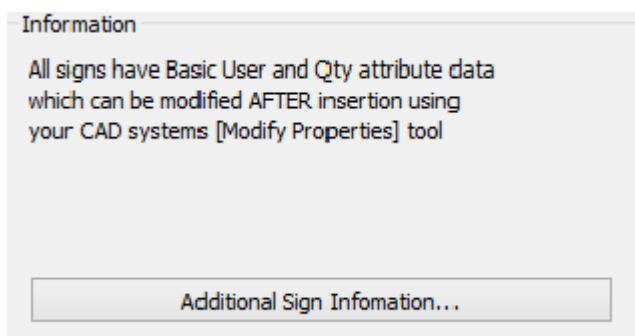
If *Include Leaders* is disabled (unchecked) then the Sign rotation method can be set to Specify on screen or Preset rotation

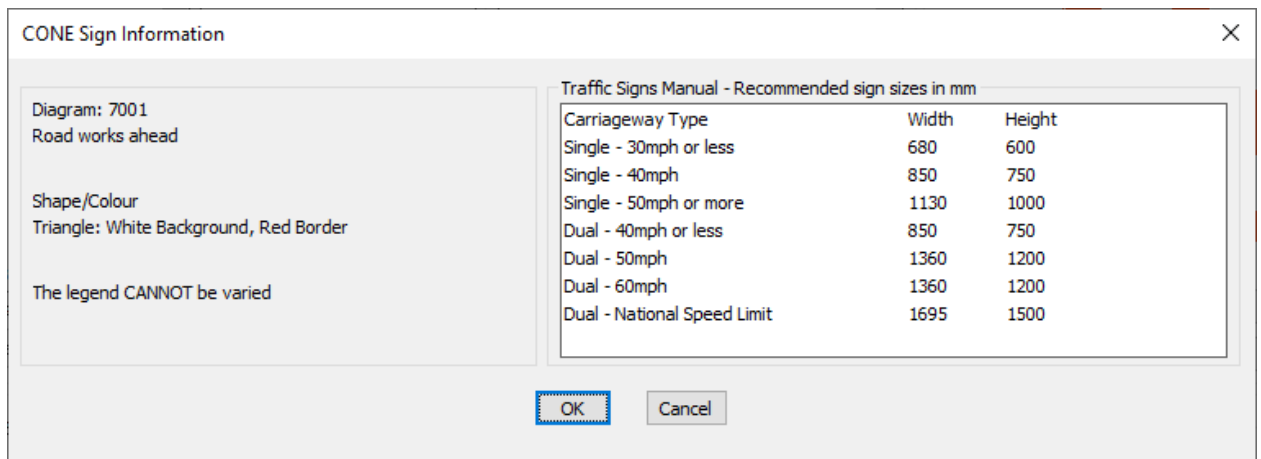
If the *Specify on screen* checkbox is checked then you will be prompted for the sign rotation angle during insertion

If the *Specify on screen* checkbox is unchecked then the sign will be inserted at the angle set in the Preset Rotation edit box

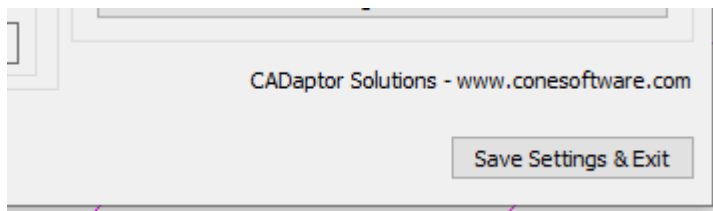
Additional Sign Information

Displays additional sign information in a secondary dialog window





Save Settings & Exit



Selecting this button will save all the default settings for the dialog and exit the *Sign Search Browse and Insert tool* without inserting a sign

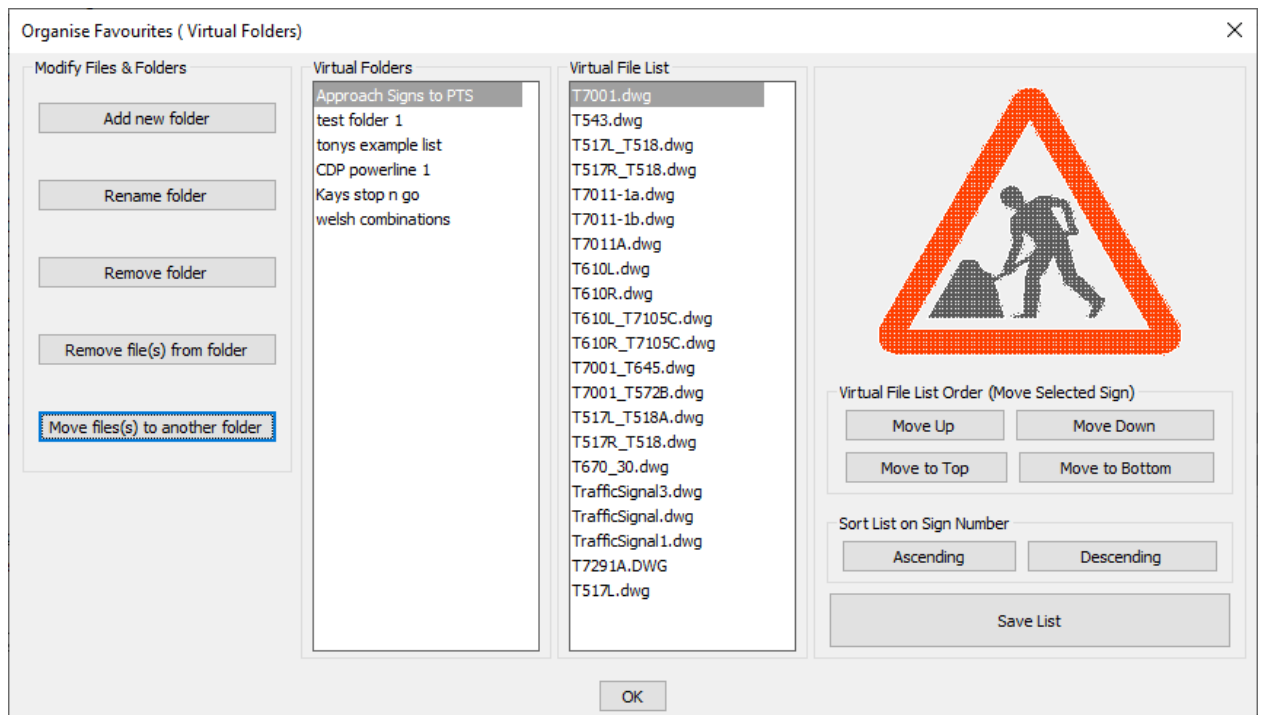
Add Sign to Favourites and Organise Favourites

This is simply a method that allows you to organise the location of CONE signs to your own preferences

Up to 15 virtual folders (Favourites) are supported.

Organise Favourites

To organise favourites pick the *Organise Favourites* button and secondary dialog window will be presented



Add New Folder

Pick this button and enter a folder description, the new favourites folder will be created

Rename Folder

Select a folder from the Virtual Folders list and pick the *Rename Folder* button to change the folder description

Remove Folder

Select a folder from the Virtual Folders list and pick the *Remove Folder* button to delete the folder

Note: A warning will be issued with an option to cancel this action

Files (signs) can be removed from a folder or moved to a different folder by selection of:

Remove file(s) from folder

Select a file from the Virtual files list and pick this button to remove a file

Note: A warning will be issued with an option to cancel this action

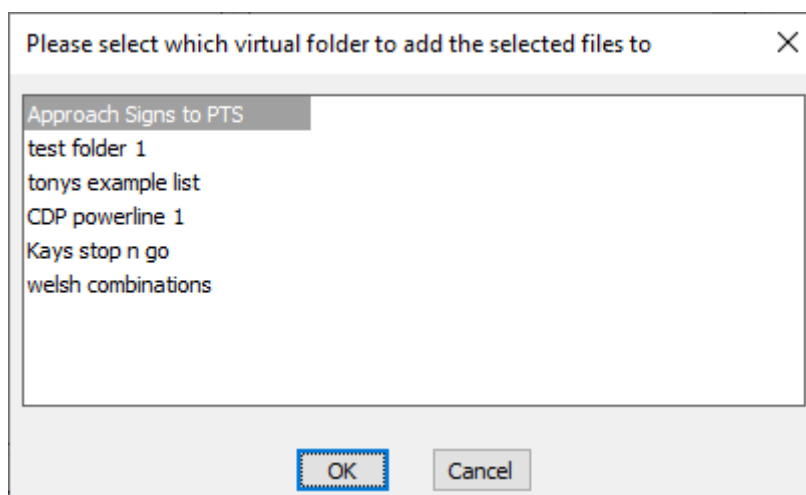
Move file(s) to another folder

Select a file from the Virtual files list and pick this button to move a file to a different Virtual Folder

Note: A warning will be issued with an option to cancel this action

Add sign to favourites

To add a sign to a favourites folder pick the *Add signs to favourites* button and a dialog will be displayed

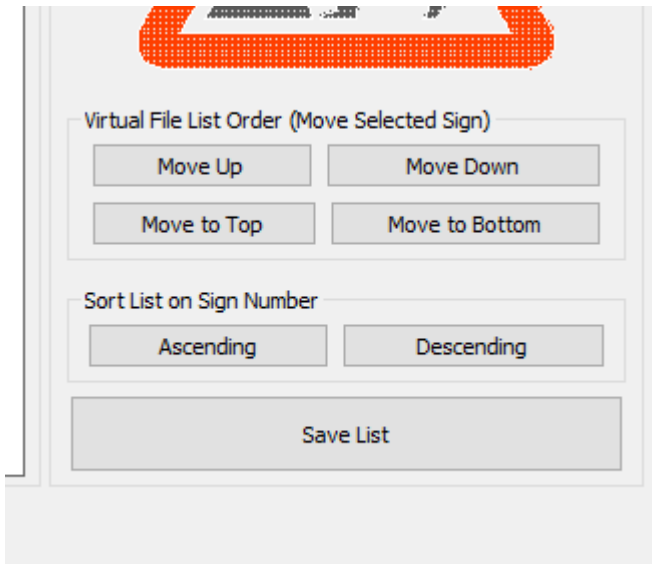


Select the virtual folder which you would like to add the sign to and pick the *OK* button

Note: it is possible to select and add multiple signs at once using the SHIFT &/or CTRL keys when clicking on sign names.

Ordering Signs in Favourites Folders

Signs added to the favourite folders are displayed in the order they are added, it is possible to change this order



Once signs are added to the list of favourites, they can be rearranged by use of the buttons at the right of the Favourite Signs dialog.

Move Up:

Move the Current selected sign ONE position up the list

Move Down:

Move the Current selected sign ONE position down the list

Move to Top:

Move the Current selected sign to the FIRST position in the current list

Move to Bottom:

Move the Current selected sign to the LAST position in the current list

Sort List on Sign Number:

There are two options to sort signs into numerical order:

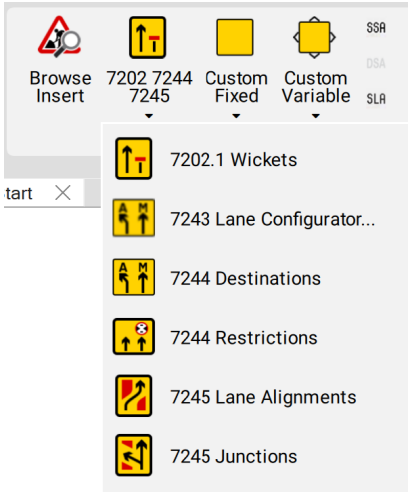
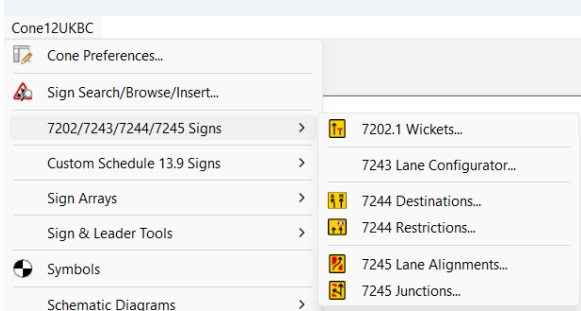
Ascending: puts signs in smallest to largest number order

Descending: puts signs in largest to smallest number order

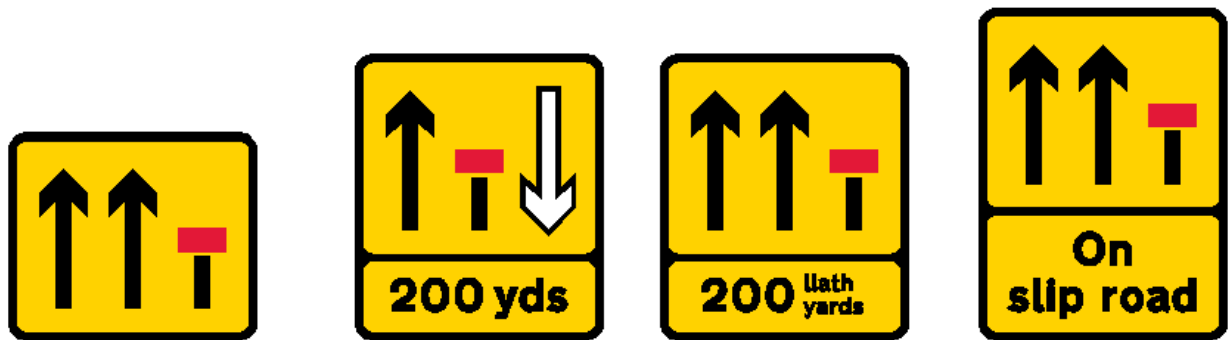
Save List:

Pick this button to save your changes to the ordering of signs in the list, if you close the dialog by clicking the OK button any re-ordering of signs will not be saved.

7202.1 Wicket Signs

Commands: CUK7202 RIBBON: CONE12 Main: SIGN TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR: CONE12_UK_Sign Tools	

TYPICAL 7202.1 SIGNS



Create 7202.1 Type Sign

Lanes

- ☒ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6

Base Plate Legend

- ☐ No Base Plate
- ☐ On slip road [Exit]
- ☐ On slip road [Entry]
- ☐ Other Legends (English Only)
- ☒ Distance

Enter Distance in Yards:

Other Legends

- ☒ Road works
- ☐ Road works ahead
- ☐ Mobile works
- ☐ Mobile works ahead

Base Plate Language

- ☒ English
- ☐ Welsh-English

Sign Insert Settings

Sign Insert Scale:

Sign Symbol Scale:

- ☒ Sym Scale = Sign Scale
- ☐ Include leaders
- ☒ Group signs and leaders

Qty (for schedule purposes only):

Leader Type & Angle

- ☐ Dog Leg Leader
- ☐ Ortho Leader

Sign Rotation Method

With Leaders

- ☒ Zero
- ☐ Align
- ☐ Perp

Without Leaders

- ☐ Specify on screen

Preset rotation:

OK **Cancel**



The 7202.1 Sign configuration tool enables you to create many variations of this type of sign

Lanes: Select the desired number of lanes (2 to 6) then select either Arrow, T-Bar or Contraflow Arrow for each lane

Base Plate Legend: The sign can be configured with or without a base plate. A base plate can be either a distance in yards or On slip road exit or On slip road entry

If the Distance base plate option is chosen then you may enter the distance in yards in the edit box provided

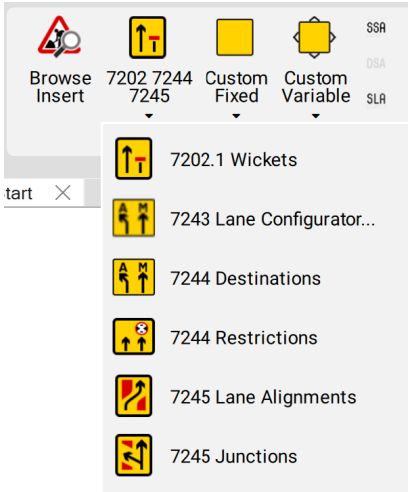
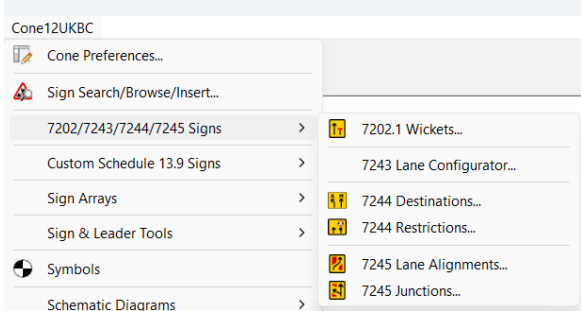
The Base Plate Language can be either English or Welsh/English

Sign Insert Settings: The options shown are the same as the Sign Search Browse and Insert Tool

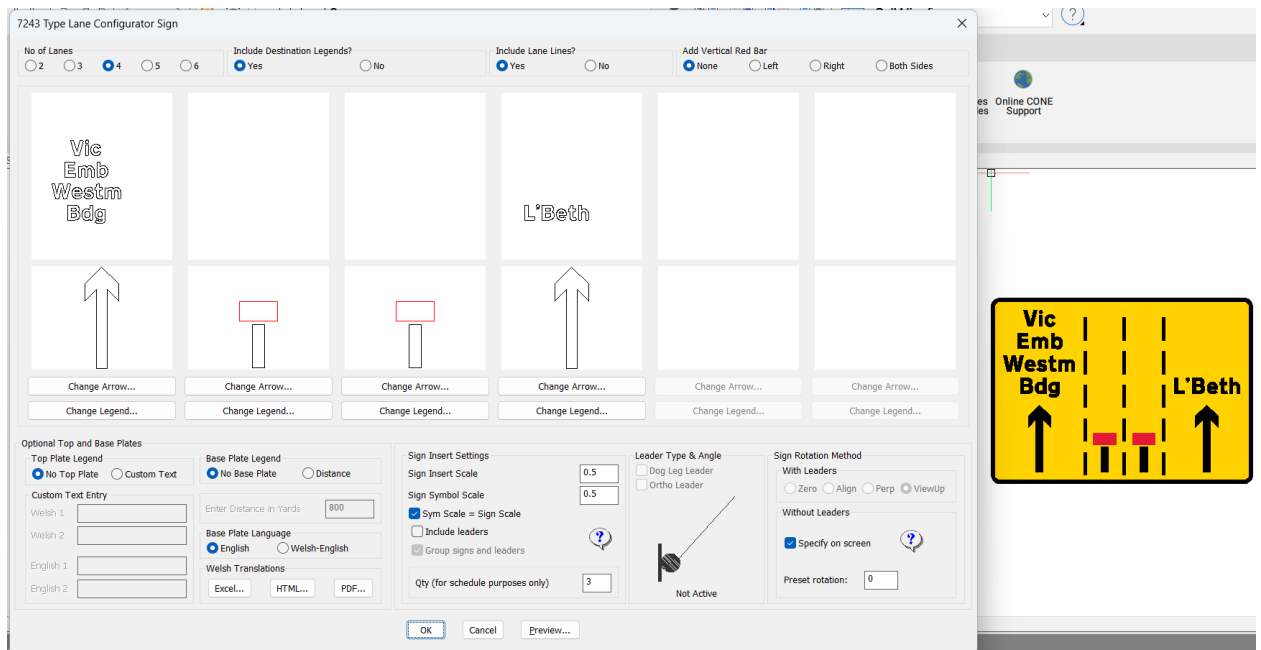
Note: Several of these types of signs are also available for insertion from the 7202X folder in the Sign Search Browse and Insert tool

The signs can be subsequently modified with the Modify Text or Data on Signs tool

7243 Lane Configurator

Commands: CUK7243 RIBBON: CONE12 Main: SIGN TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR: CONE12_UK_Sign Tools	

The 7243 Lane Configuration tool enables you to create many variations of this type of sign. Providing a crossover between 7202.1 and 7244 Destination signs.



Options



:Lanes: Select the desired number of lanes (2 to 6)

Include Destination Legends?: Yes or No

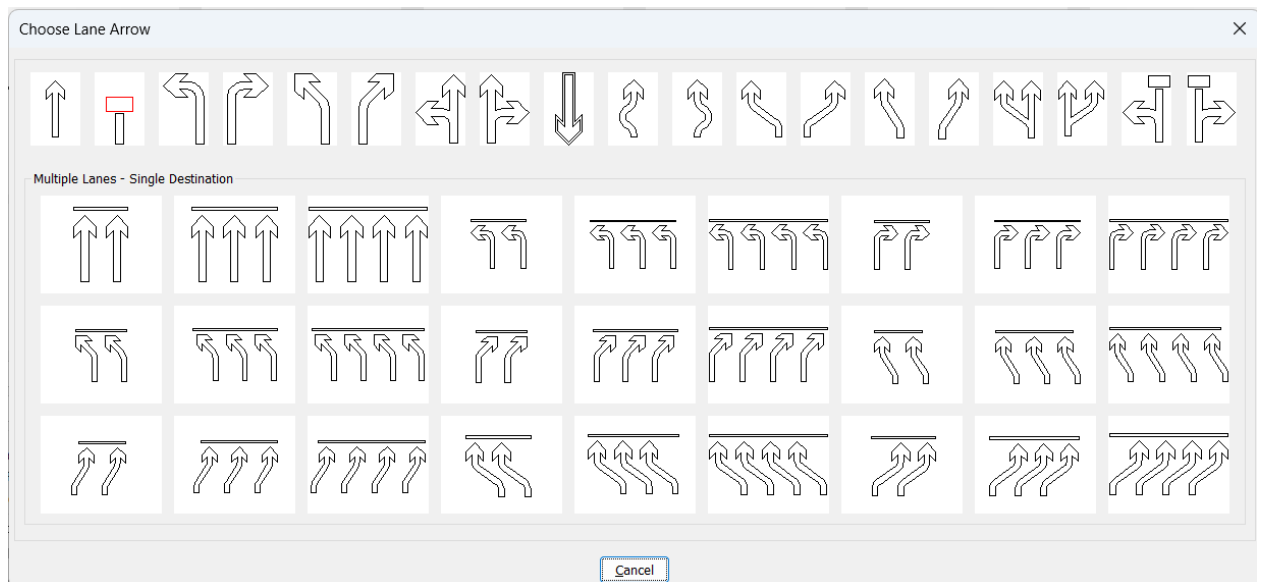
Include Lane Lines?: Yes or No

Add Vertical Red Bar: Choices are None Left , Right or both sides



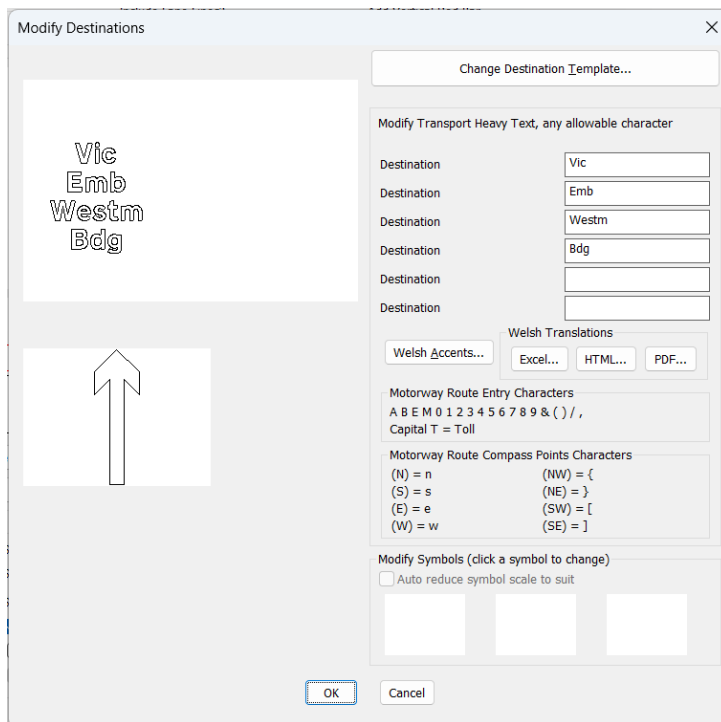
Example of a sign with a Left Vertical Red Bar

Arrows: For each lane pick the Change Arrow button to select from a wide range of arrow options



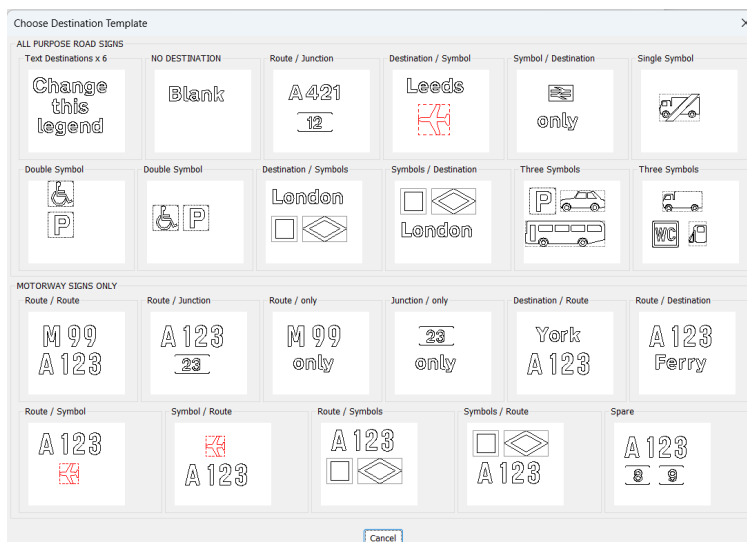
Pick the image of the arrow required and the configuration the tool will return back to the main dialog

Lane Legend: For each lane pick the Change Legend button to select from a wide range of legend option templates

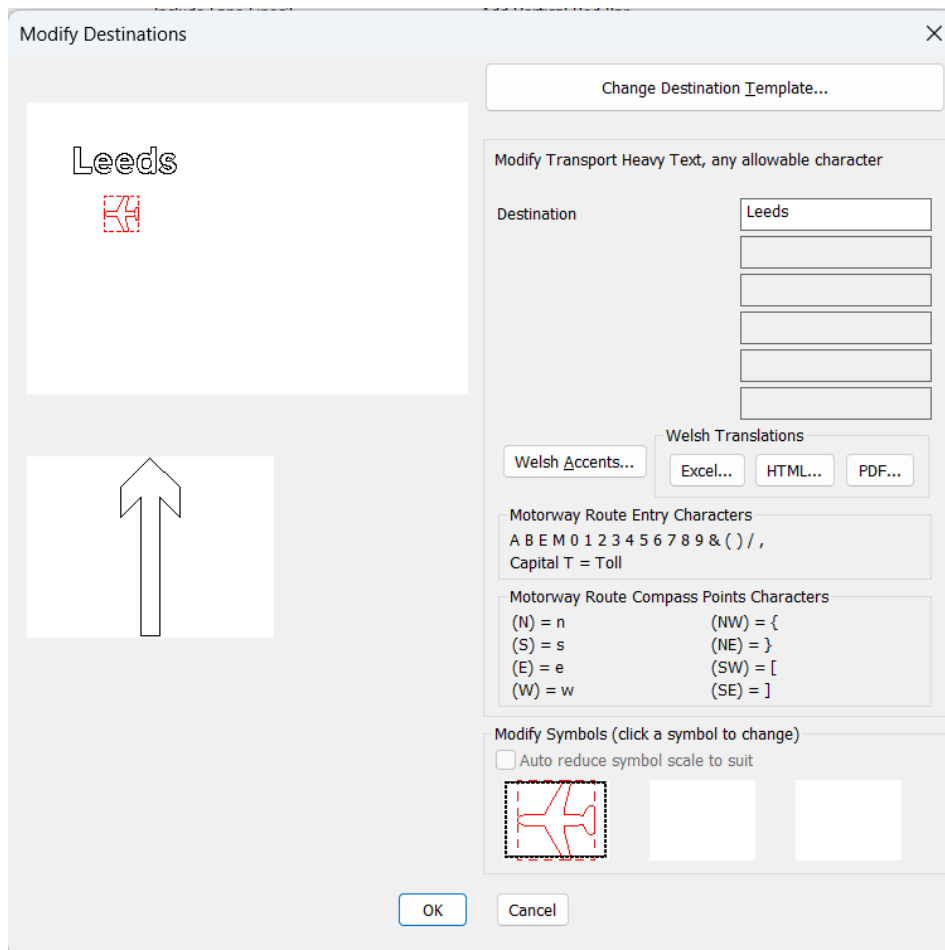


If the Legend template is not what you require, then pick the

Change Destination Legend button and select the desired legend template by clicking on the image



In this example we have selected the ALL PURPOSE ROADS Destination/Symbol



This provides a method of changing the symbol by picking the symbol and entering a new destination. Select OK when finished changing the destination legend

Top Plate Legend: The sign can be configured with or without top plate, enter one or two custom text lines in the edit boxes (Up to four lines if the sign is Welsh and English)

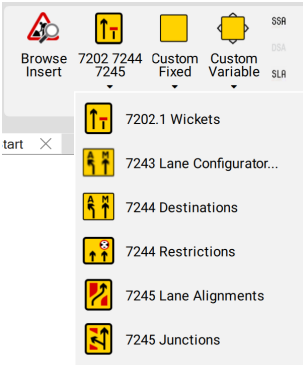
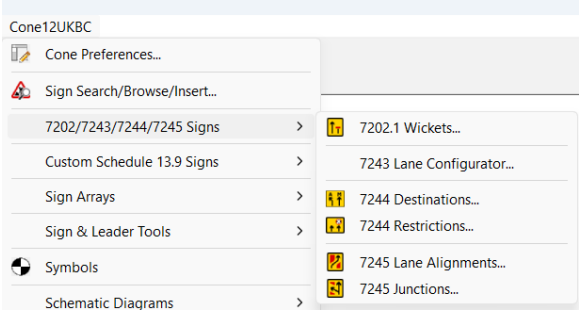
Base Plate Legend: The sign can be configured with or without a base plate. A base plate can only be a distance in yards

If the Distance base plate option is chosen then you may enter the distance in yards in the edit box provided

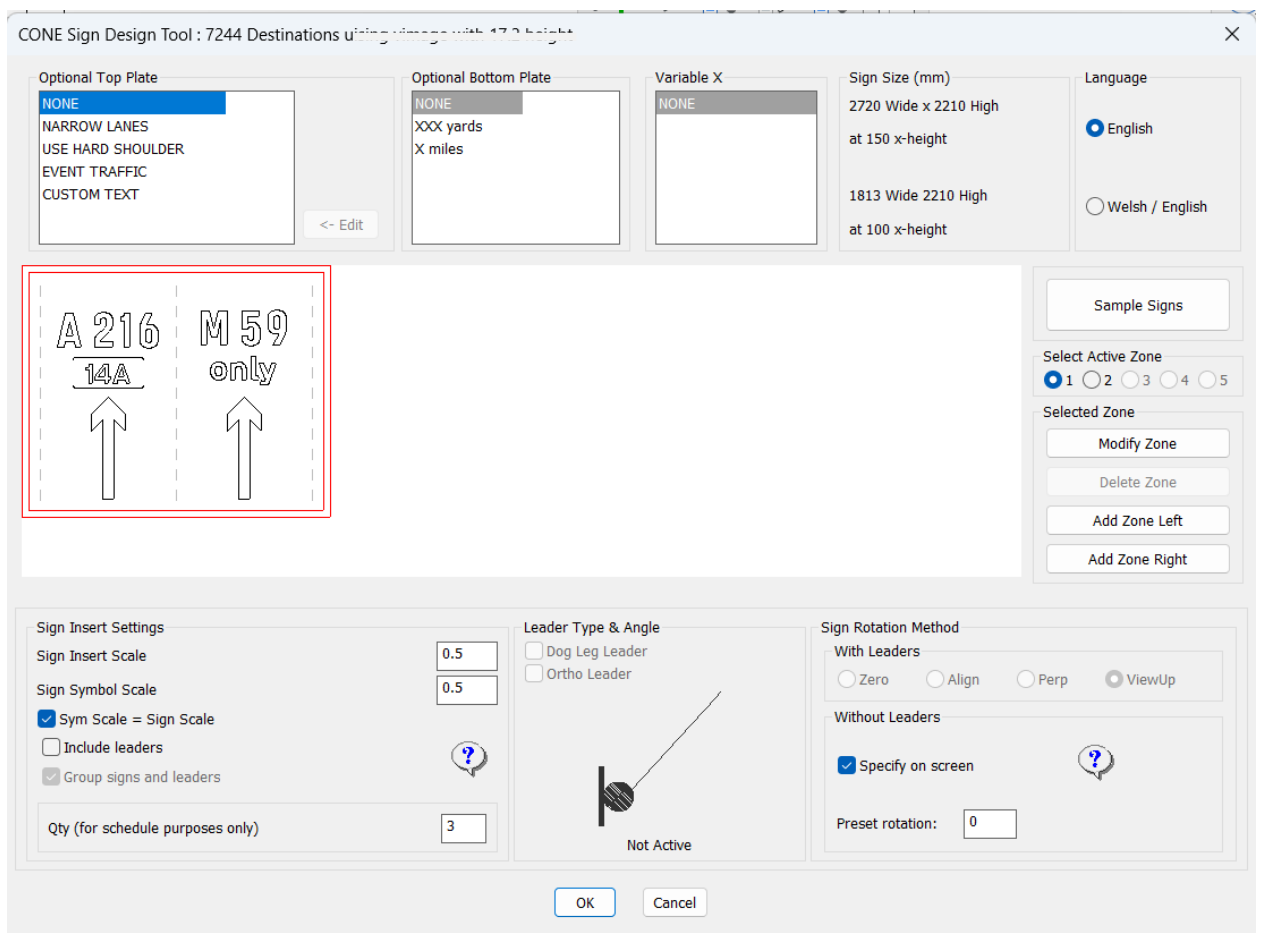
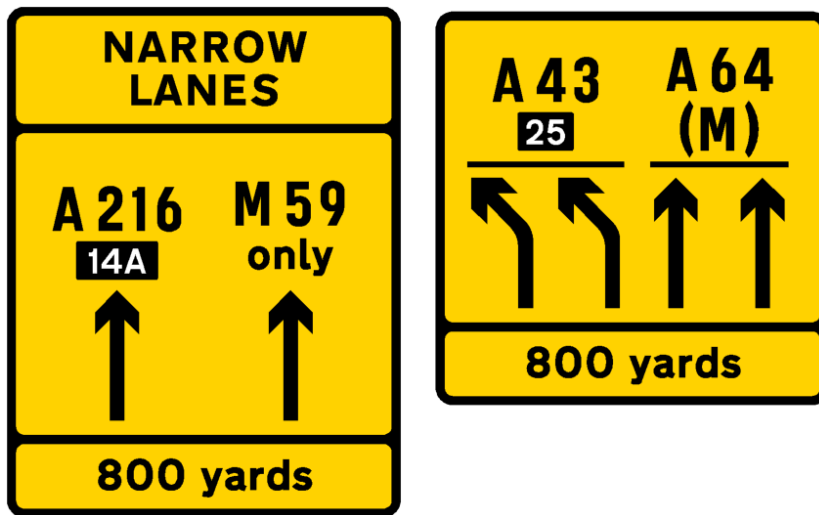
The Base Plate Language can be either English or Welsh/English

Sign Insert Settings: The options shown are the same as the Sign Search Browse and Insert Tool

7202/7244/7245 Signs - 7244 Destinations

Commands: CUK7244D RIBBON: CONE12 Main: SIGN TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR: CONE12_UK_Sign Tools	

Typical Signs



The 7244 Destination Sign configuration tool enables you to create many variations of these types of sign

7244 Destination signs have vertical zones, that can be configured with one or more lane arrows

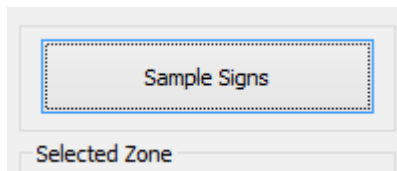
leading to a destination. The space available for the destination text is limited and is a deliberate design feature in the TSRGD to prevent excessive sign clutter

The minimum number of zones is two, there is no maximum, the maximum number of arrows per zone is four

The signs may include optional Top and Bottom plates which may be in English or Welsh/English

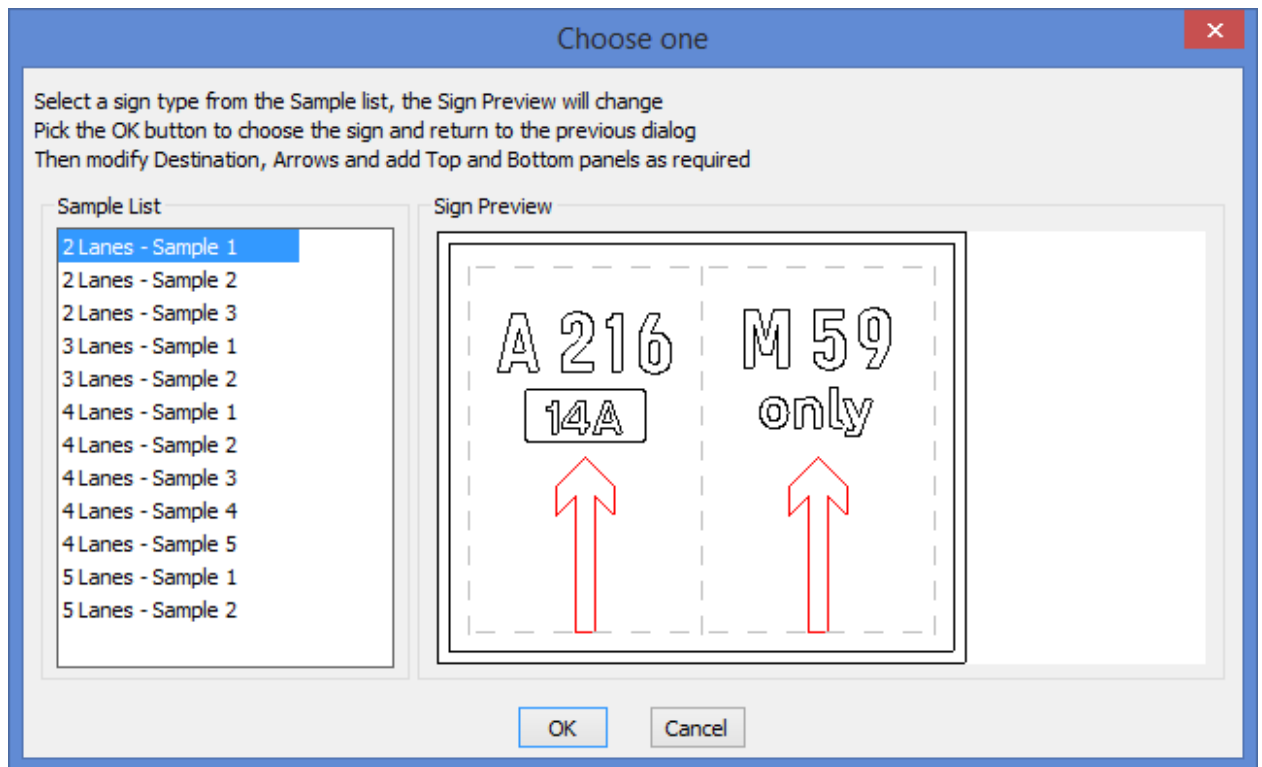
Sign Insert Settings:

The options shown are the same as the Sign Search Browse and Insert Tool



A good starting point would be to have a look at the Sample Signs available

by picking the Samples Signs button which will load a sub-dialog as described next.



The 7244 Destinations Samples

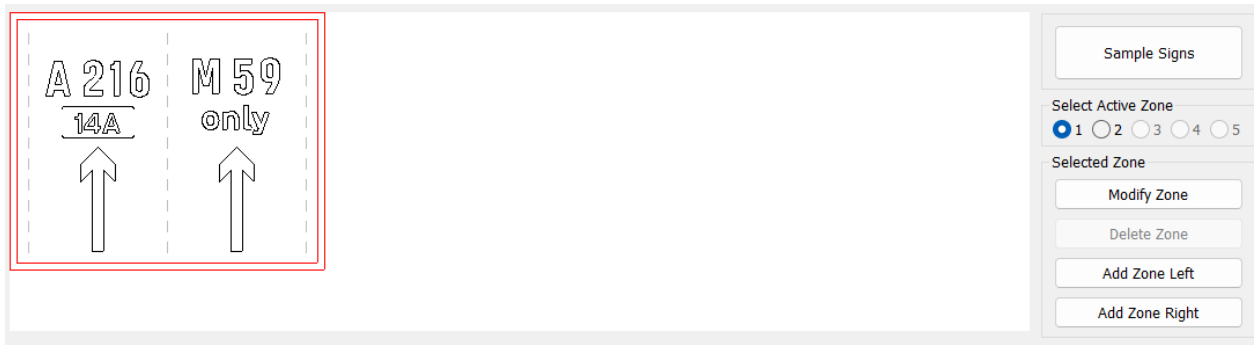
Choose a sample from the left hand list box that is close to your requirements and press the OK button to return to the main dialog.

You will then need to change the destination text and type and this is accomplished
Changing the Zone via the Modify Zone button

Changing the Zone

The active zone is set by selecting one of the five radio buttons in Select Active Zone

Zones are numbered left to right

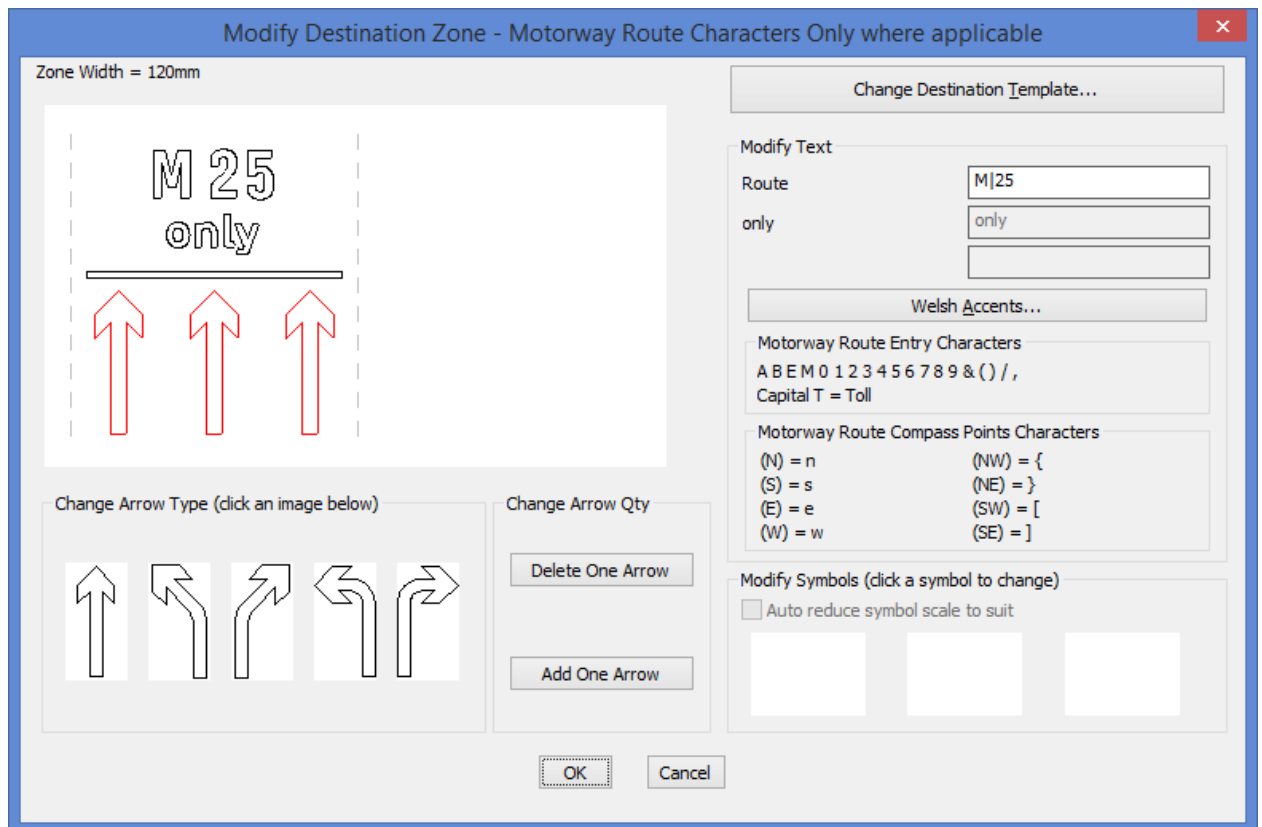


Add Zone Left or Add Zone Right will add a additional default zone to the left or right of the active zone

(The minimum number of zones is two, maximum if five)

Delete Zone: If there are more than two zones then the Delete Zone button will delete the current zone

Modify Zone: Select this button to change the contents of the zone, a sub-dialog is displayed (see below)



Arrow Type

There are five arrow types , click the desired arrow image to change the current arrow type

Arrow Quantity (Number of arrows per zone, minimum one, maximum four)

Adding or deleting arrows is accomplished via the Delete One Arrow and Add One Arrow buttons

Modifying the Destination

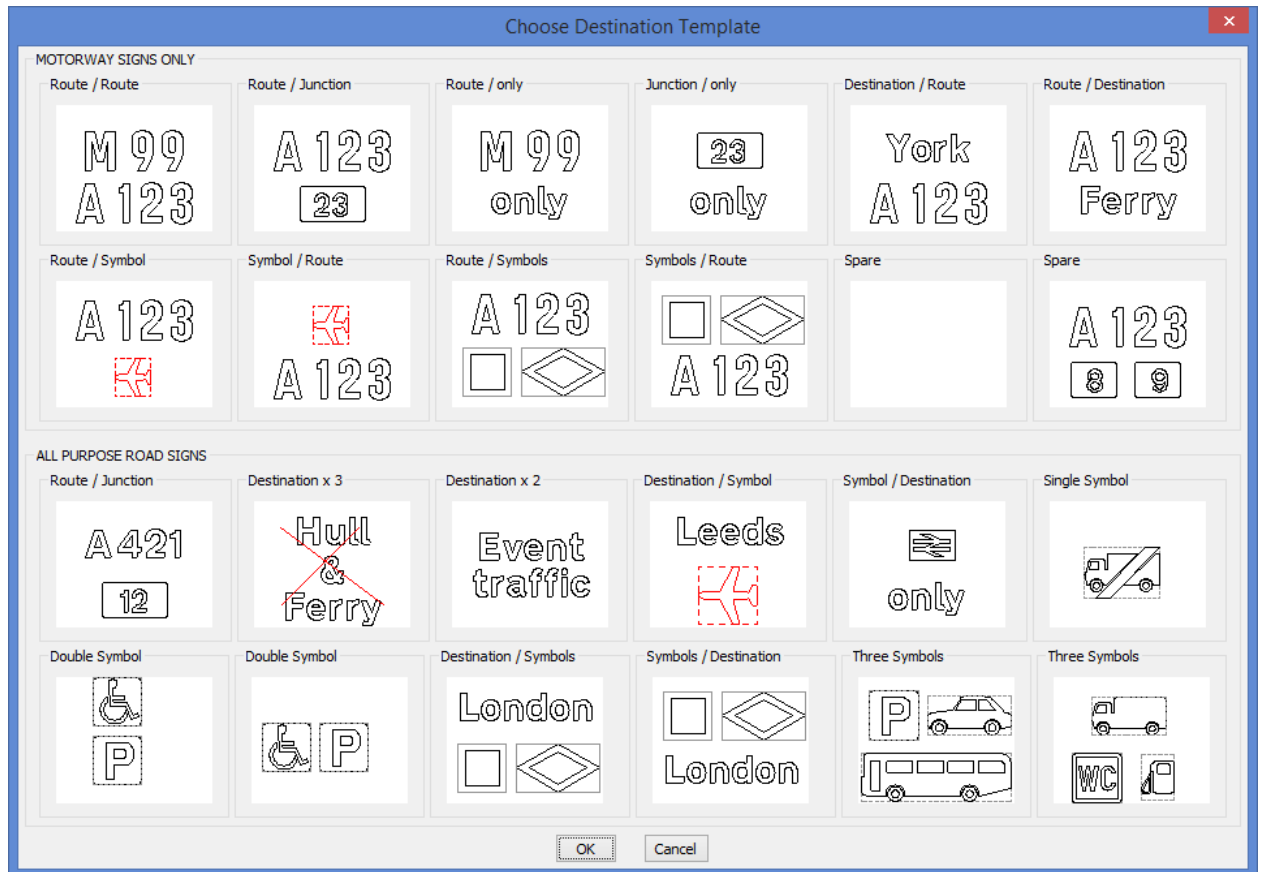
The current destination text or symbol

Type in new destination text, route or junction as required or select different symbols if applicable

Select the OK button to return to the main dialog

OR

If you wish to change the current Destination Type select the Change Destination Template... button



There are destination templates for Motorway Signs only and another set for All Purpose Roads

Choose the template required by clicking the desired template image, the dialog will be closed and you will be returned to the previous Modify Destination Dialog

Note: Three lines of destination text is only possible when only one arrow only is configured for the zone

Type in new destination text, route or junction as required or select different symbols if applicable

Note: Motorway Route Numbers:

Only the following characters are acceptable: A B E M 0 1 2 3 4 5 6 7 8 & () / ,

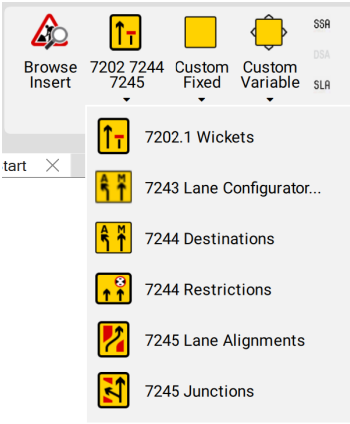
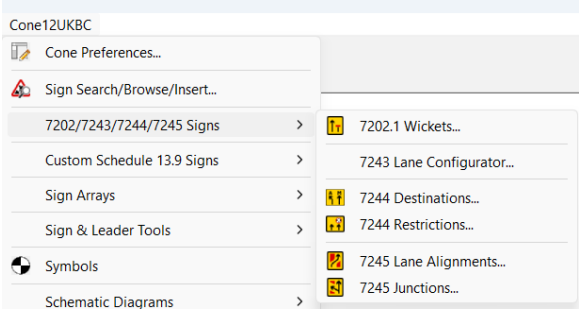
And the special characters for compass points n s e w { } { []

Example: for route number M 6 (N) Toll type M6nT (NO SPACES)

When you have finished entering text and/or choosing symbols

Select the OK button to return to the main dialog

7202/7244/7245 Signs - 7244 Restrictions

Commands: CUK7244R RIBBON: CONE12 Main: SIGN TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR: CONE12_UK_Sign Tools	

Create 7244 Temporary Lane Usage / Restriction Signs

Optional Top Plate

NONE
NARROW LANES
USE HARD SHOULDER
EVENT TRAFFIC
CUSTOM TEXT

<- Edit

Optional Bottom Plate

NONE
XXX yards
For X miles
X miles

Variable X

NONE

Sign Size (mm)

2720 Wide x 2720 High
at 150 x-height

1815 Wide x 1815 High
at 100 x-height

Language

☒ English
☐ Welsh / English

No Of Lanes

☐ 2 ☒ 3 ☐ 4 ☐ 5

Additional Filters

☐ Lanes Closed
☐ Contraflow Arrow

7244R_3_AAR
7244R_3_ADD
7244R_3_ARA
7244R_3_DDA
7244R_3_RAA
7244R_3_RAR

Roundels

Sign Insert Settings

Sign Insert Scale: 0.5

Sign Symbol Scale: 0.5

☒ Sym Scale = Sign Scale

☐ Include leaders

☒ Group signs and leaders

Qty (for schedule purposes only): 3

Leader Type & Angle

☐ Dog Leg Leader
☐ Ortho Leader

Not Active

Sign Rotation Method

With Leaders

☐ Zero ☐ Align ☐ Perp ☒ ViewUp

Without Leaders

☒ Specify on screen

Preset rotation: 0

OK Cancel

The 7244 Restriction Sign configuration tool enables you to create many variations of this type of sign

7244 Restriction Signs are always 2720mm wide (@ 150 x-height)

The number of lanes varies from 2 to 5, lanes can be configured with an arrow, lanes closed (t-bar) or a contraflow arrow

There is always at least one regulatory roundel per sign. In a small number of cases two are possible

The signs may include optional Top and Bottom plates which may be in English or Welsh/English

Sign Insert Settings:

The options shown are the same as the Sign Search Browse and Insert Tool

No Of Lanes: Select the desired number of lanes 2,3,4 or 5

Additional Filters:

If one or more lanes will be closed, enable select the Lanes Closed check box

If a contraflow arrow is required in the outside lane, enable the Contraflow Arrow checkbox

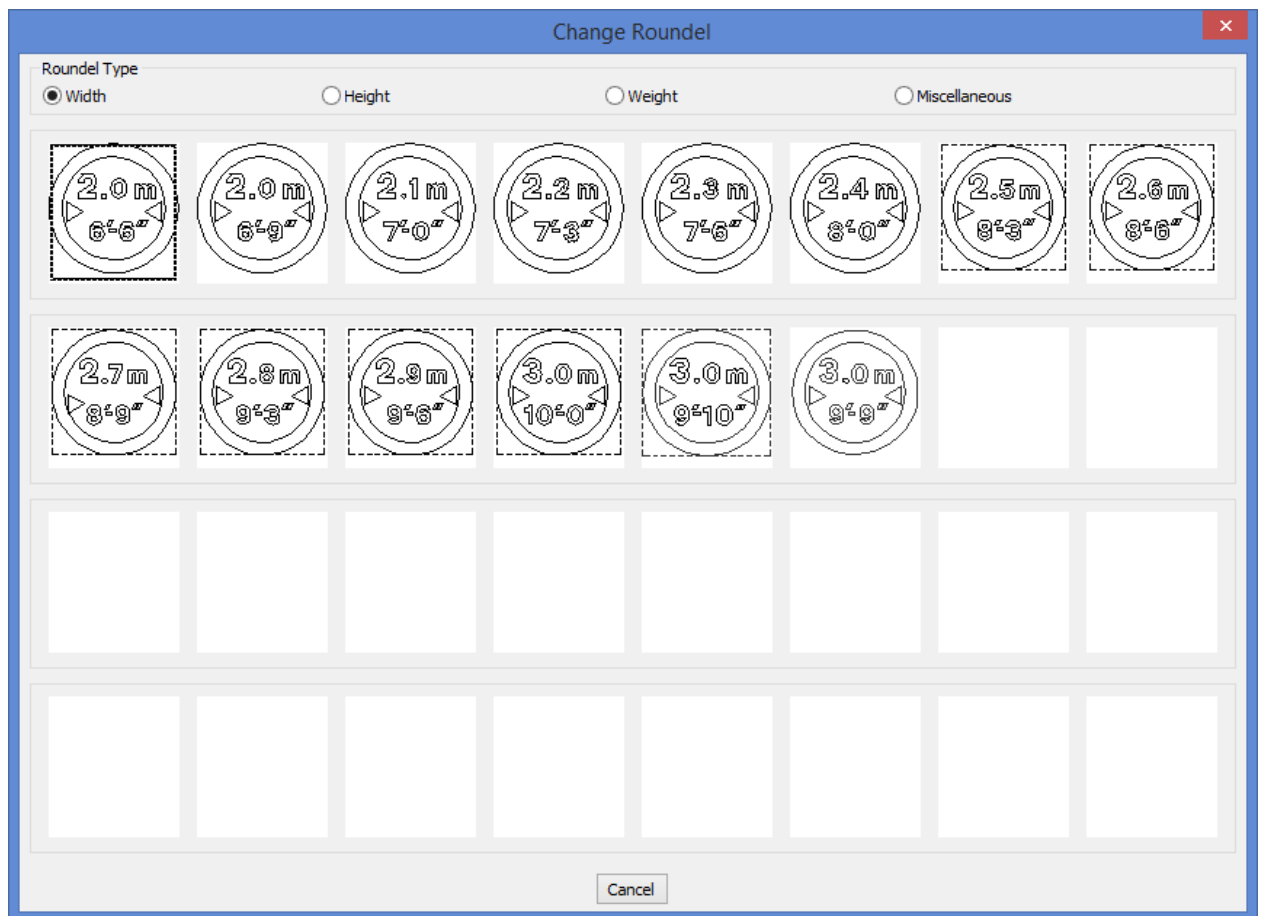
A list of possible configurations is displayed in the list box, select the desired configuration, a simple preview will be shown in the left hand image area

The actual roundel to be used can be chosen by picking the roundel in the right hand image area

A sub dialog will be loaded as shown below

Choose the Roundel Type (Width . Height, Weight or Miscellaneous)

Then pick the desired roundel image, the dialog will close the and the roundel image in the main dialog updated



Optional Top Plate: Choose either:

NONE

NARROW LANES

USE HARD SHOULDER

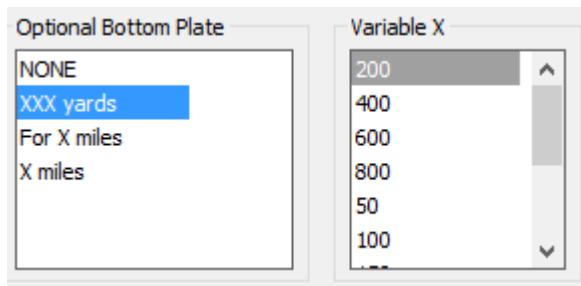
EVENT TRAFFIC

CUSTOM TEXT

If you select CUSTOM TEXT then click the <-Edit button and enter the desired text in the edit boxes

Text should be upper case and no more that 11 characters per line

Four edit boxes are enabled for Welsh/English language signs



Optional Bottom Plate: Choose either:

NONE

XXX yards

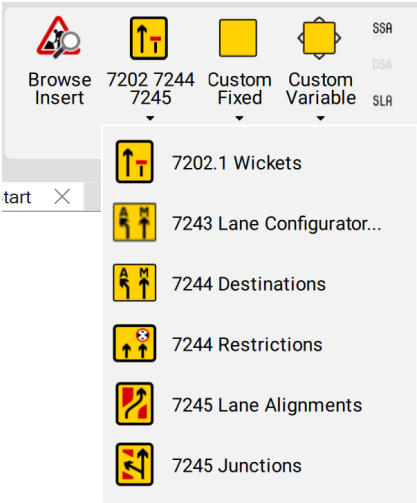
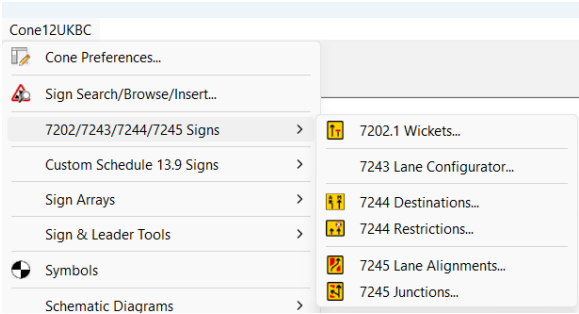
For X miles

X miles

Then select one of the options from the Variable X list box

The signs can be subsequently modified with the Modify Text or Data on Signs tool.

7202/7244/7245 Signs - 7245 Lane Alignments

Commands: CUK7245 RIBBON: CONE12 Main: SIGN TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR: CONE12_UK_Sign Tools	

The 7245 Lane Alignments Sign configuration tool enables you to create many variations of these types of sign

The 7245 range of signs replace TSRGD 2002 signs, diagram numbers 7203 - 7207 inclusive and 7207 to 7256 and have NO text or roundels above the arrows, separate signs to 7244 should be used when text and/or roundels are required

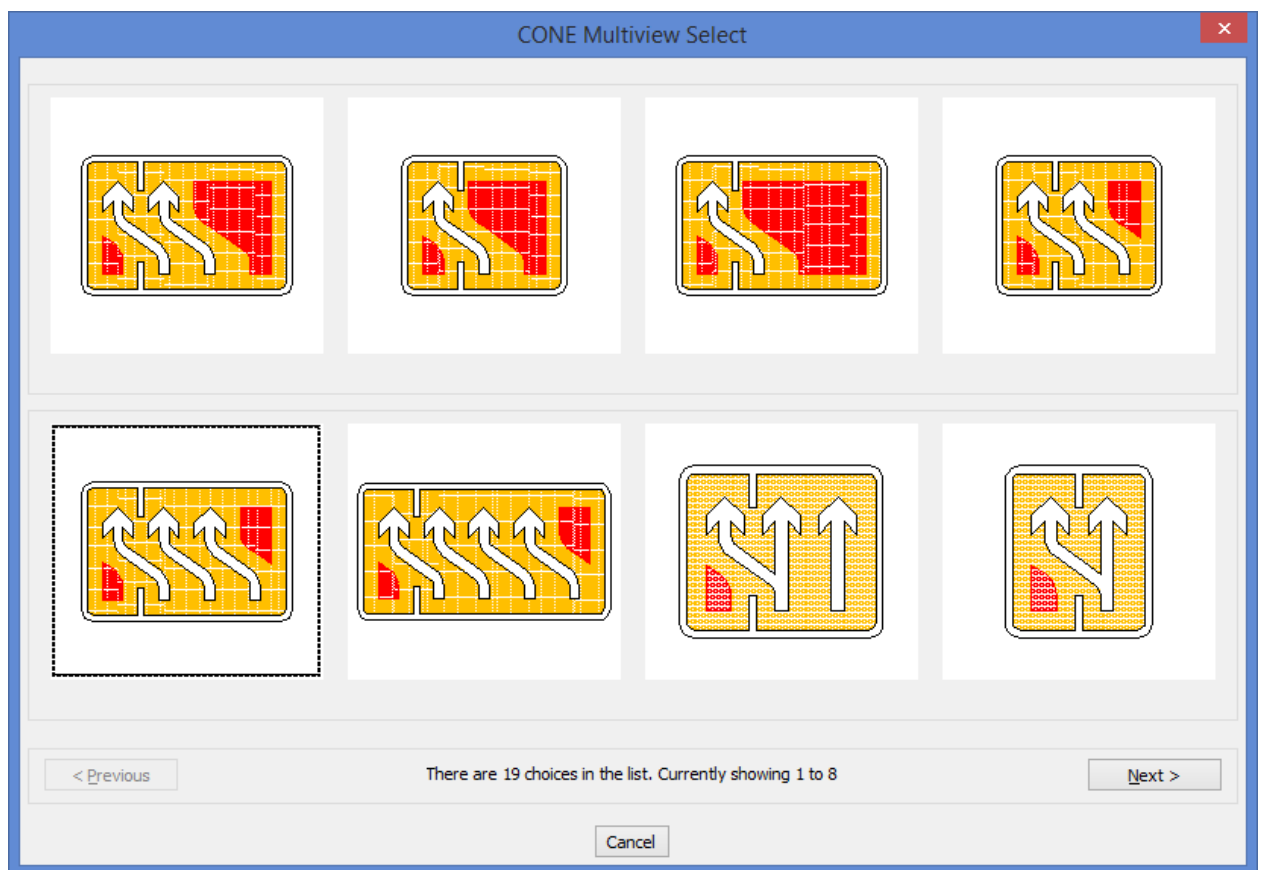
The signs may include optional Top and Bottom plates which may be in English or Welsh/English

Sign Insert Settings:

The options shown are the same as the Sign Search Browse and Insert Tool

The Alignment Type is selected from the left hand list and a list of variations for the selected alignment type is displayed in the right hand list. As you select each variation from the right hand list (either by mouse selection or using the keyboard up and down arrows) an image of the variation is displayed.

Note: The optional top and bottom plates if selected are not displayed



As an alternative to selecting individual variations, the Multiview Select button can be used instead

Eight variations per page are displayed. use the Next> and <Previous buttons to view each page

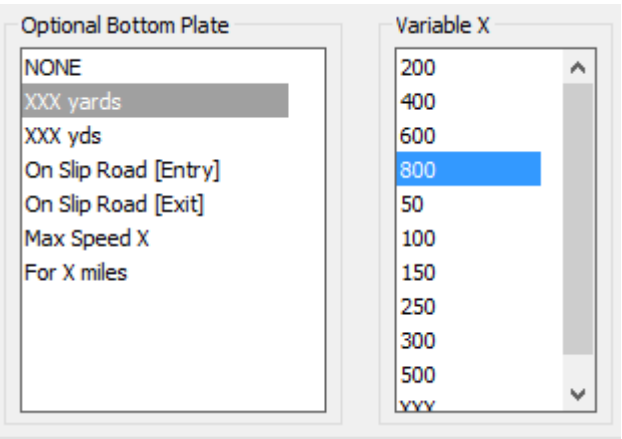
Simply pick the desired image to return to the main dialog

Optional Top Plate: Choose either:

NONE

NARROW LANES

USE HARD SHOULDER



Optional Bottom Plate: Choose either:

NONE

XXX yards

xxx yds

On Slip road [Entry]

Slip road [Exit]

Max Speed X

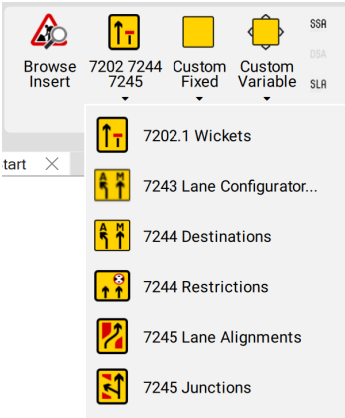
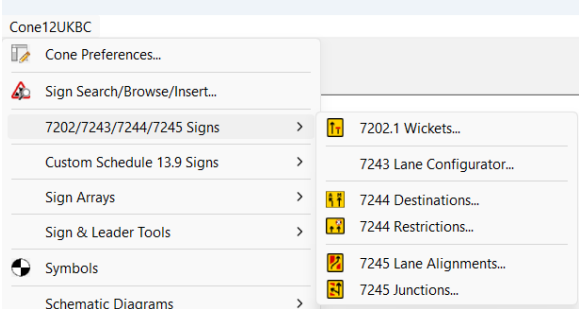
For X miles

Then select one of the options from
the Variable X list box

Select the OK button to begin the sign insert procedure

The signs can be subsequently modified with the Modify Text or Data on Signs tool.

7202/7244/7245 Signs - 7245 Junctions

Commands: CUK7245J RIBBON: CONE12 Main: SIGN TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR: CONE12_UK_Sign Tools	

The 7245 Junctions Sign configuration tool enables you to create many variations of these types of sign

The signs may include optional Top and Bottom plates which may be in English or Welsh/English

Sign Insert Settings:

The options shown are the same as the Sign Search Browse and Insert Tool

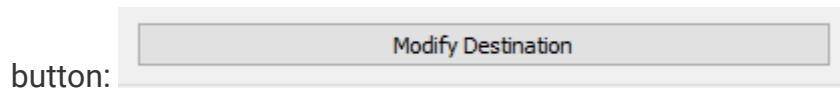
The Junction Sign Type by number of lanes is selected from the right hand list. As you select each variation from the right hand list (either by mouse selection or using the

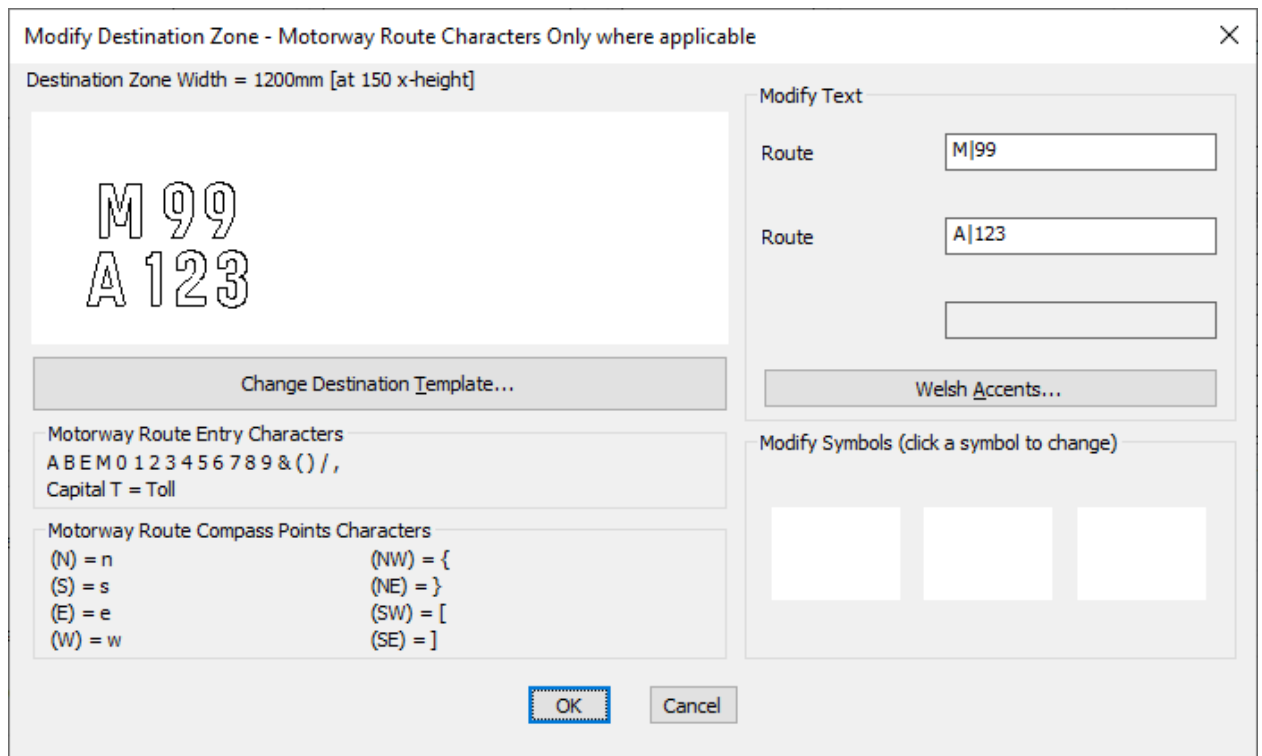
keyboard up and down arrows) an image of the variation is displayed. After choosing a number of lanes for the sign, the destination arrow can be mirrored to the opposite side using the radio buttons labelled LEFT & RIGHT



Note: The optional top and bottom plates if selected are not displayed

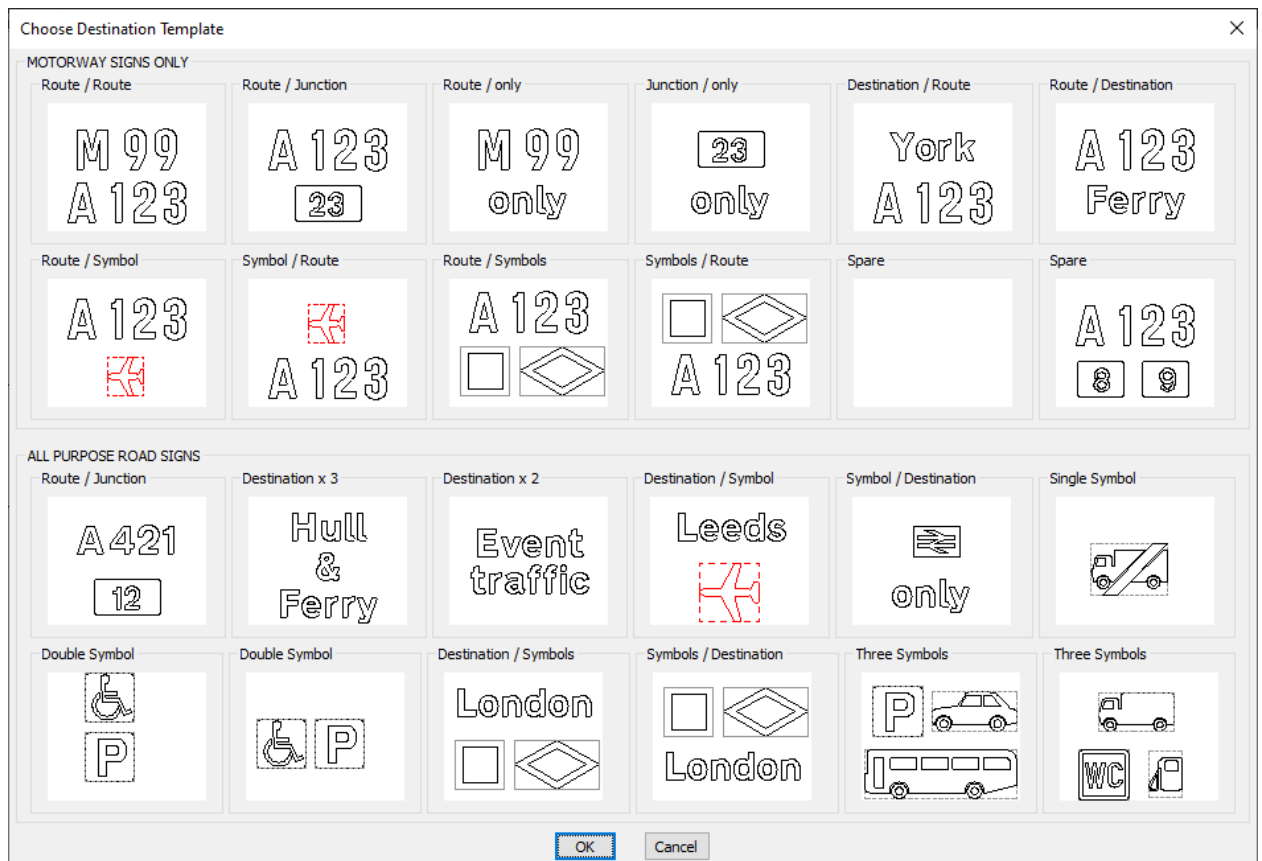
The Destination Text can be edited using the Modify Destination



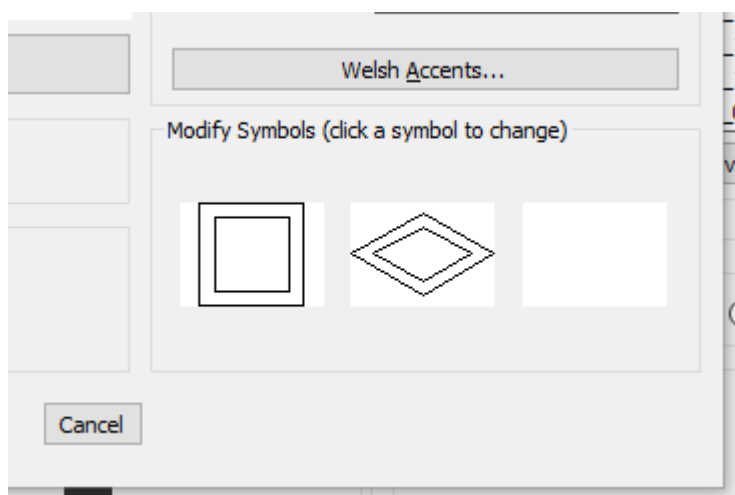


The list of options Templates for the destination can be selected from the dialog after pressing the **Change Destination Template...** button.

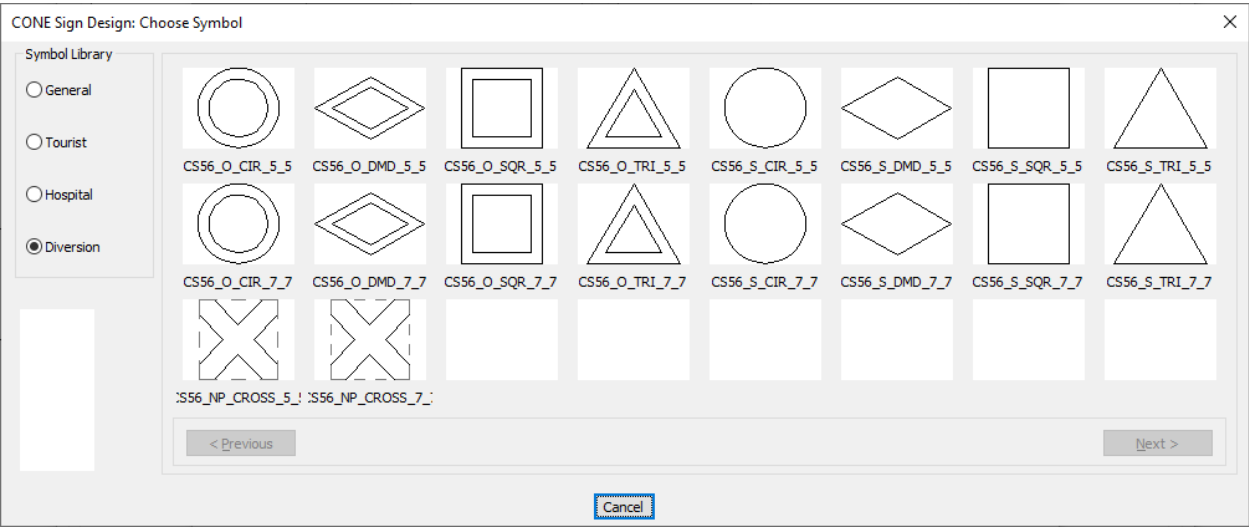
One of text and symbol combinations can be picked from the dialog:



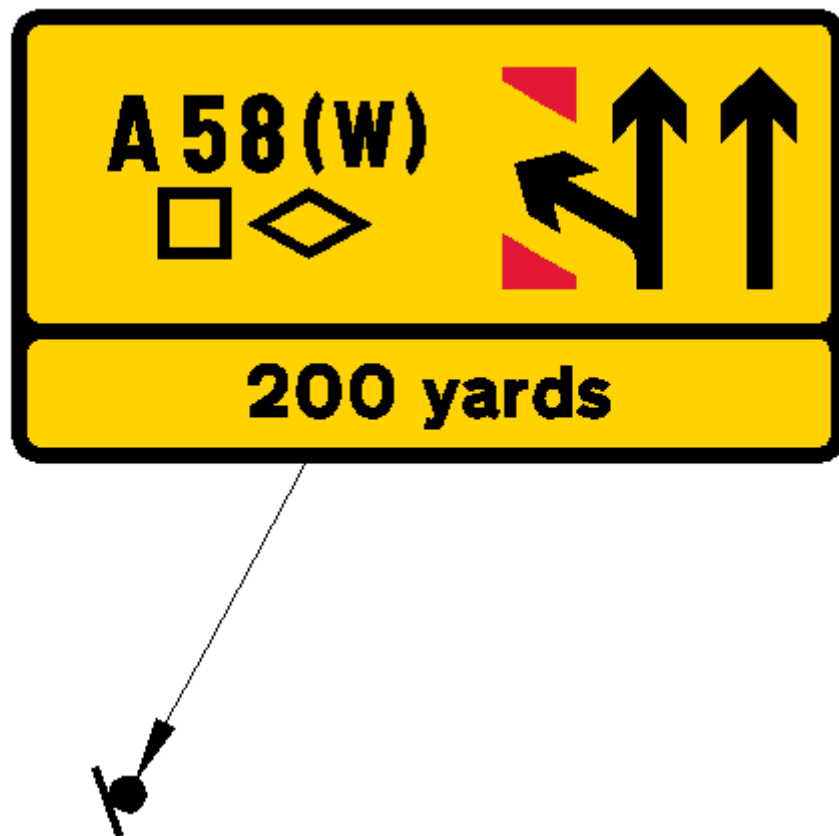
When selecting a template that contains a symbol character, the default symbol in the template can be replaced with one from the library of standard symbols available, click the symbol icon to display the available options:



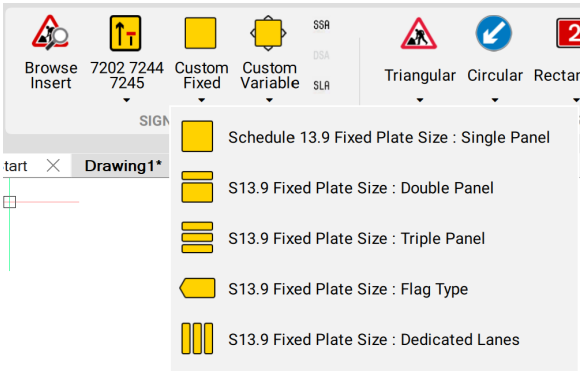
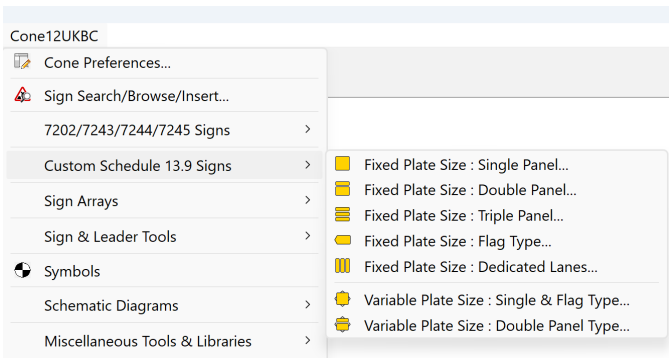
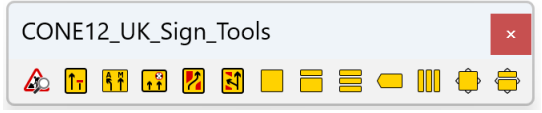
clicking either of the two symbols in the destination template displays the options as shown below:



Clicking the OK button in the main dialog will insert the sign in the usual way depending on the insert options you have specified at the bottom of the dialog.



Custom Schedule 13.9 Signs - Fixed Plate Size: Single Panel

Command: CUKFPSINGLE RIBBON: CONE12 Main: SIGN TOOLS	
CONE12UKBC Pull Down Menu	
CONE12_UK_Sign_Tools	

Typical Signs



Cone Fixed Plate Signs: Text only template SP01

Edit Legend Text
SPECIAL SIGN
THIS IS A
SAMPLE SIGN

Line space
25
0
25
25
0
0
0
0
0
0

% of X-Hgt
100
100
100
100
100
100
100
100
100
100

Target MAX X-Hgt
100

Actual MAX X-Hgt
** 65.14 **

Spare space at the margins:
There is 239 mm spare VERTICAL space
There is 0 mm spare HORIZONTAL space

Welsh Accents...
Fractions...
Example Signs...

Clear All Text
Clear All Symbols
Select From User Signs...
Save to User Signs...

Sign Insert Settings
Insert scale
1
Ref distance
0
☒ Include leaders
☒ Group signs & leader

Sign Size Settings
Single Panel Sign
Width
1050
Height
750
Border
20
Top Margin
35
Bottom Margin
20
Left Margin
30
Right Margin
30
Symbol Gap
35
Stack Divider
0
Spare Vertical Space
☐ Expand all stacks
☐ Do not expand top stack
☐ Do not expand bottom stack
Change Stack Template
Arrow Direction
☒ NONE
☐ Left Arrow
☐ Right Arrow
☐ Lower Arrow
Flag Direction
☐ Left
☐ Right
Background
☐ Yellow
☐ Blue on White
☐ White
☐ Blue
☒ Red
Border / X-hgt
☐ 40 / 106
☐ 35 / 93
☐ 30 / 80
☐ 25 / 66
☐ 20 / 53
☐ 15 / 40
Ref / Label: 13-9
Description
Schedule 13 : Temporary Sign

Leader Tip & Angle
☐ Dog Leg Leader
☐ Ortho Leader
Click to change

Sign Rotation Method
With Leaders
Default Rotation
☒ Zero
☐ Align
☐ Perp
Without Leaders
☐ Specify on screen
Preset rotation: 0

OK Cancel Preview...

The Fixed Plate Size Single Panel tool enables the design of a range of signs that can contain text, arrows and symbols that “fit” within a backplate of a specific width and height. The general idea being to create a design that is clear and readable

The best starting point is to select a stack template by selecting the Change Stack Template or Example Signs buttons.

The size of the single panel fixed plate sign is specified by entering values in the edit boxes at top right of the main dialog box.

Width: width of sign in millimetres

Height : height of sign in millimetres

Border: width of the sign border around the plate edge in millimetres

Top/Bottom/Left/Right Margin: minimum width of the margin between the border and the text or graphic elements on the sign in millimetres

Symbol Gap: an additional (margin) distance around the edge or any arrow or symbol added the the sign

Border / X-hgt

The border to X-height tool contains a selection of ideal settings of the border, margins, symbol gaps etc. to suit a particular X-height (plus or minus 6mm)

For example if the actual calculated Max x-height is approx. 56 x-hgt and the current border setting is 30mm, then selecting the 25/66 radio button will change the border, margin and symbols gaps settings to suit a 25mm border and 66 x-hgt (plus or minus 6mm)

This will in most cases result in a larger calculated Max X-Hgt

The screenshot shows a software interface for configuring sign dimensions. It includes input fields for Width (1050), Height (750), Border (20), Top Margin (35), Bottom Margin (20), Left Margin (30), Right Margin (30), Symbol Gap (35), and Stack Divider (20). Below these are two sections: 'Spare Vertical Space' with three radio button options (Expand all stacks, Do not expand top stack, Do not expand bottom stack), and 'Border / X-hgt' with six radio button options (40 / 106, 35 / 93, 30 / 80, 25 / 66, 20 / 53, 15 / 40). A blue question mark icon is located to the right of the 'Border / X-hgt' section.

Width	1050
Height	750
Border	20
Top Margin	35
Bottom Margin	20
Left Margin	30
Right Margin	30
Symbol Gap	35
Stack Divider	20

Spare Vertical Space

- ☒ Expand all stacks
- ☐ Do not expand top stack
- ☐ Do not expand bottom stack

Border / X-hgt

- ☐ 40 / 106
- ☐ 35 / 93
- ☐ 30 / 80
- ☐ 25 / 66
- ☐ 20 / 53
- ☐ 15 / 40

Arrow Direction

The position of the arrow element on the sign can be chosen from the options:

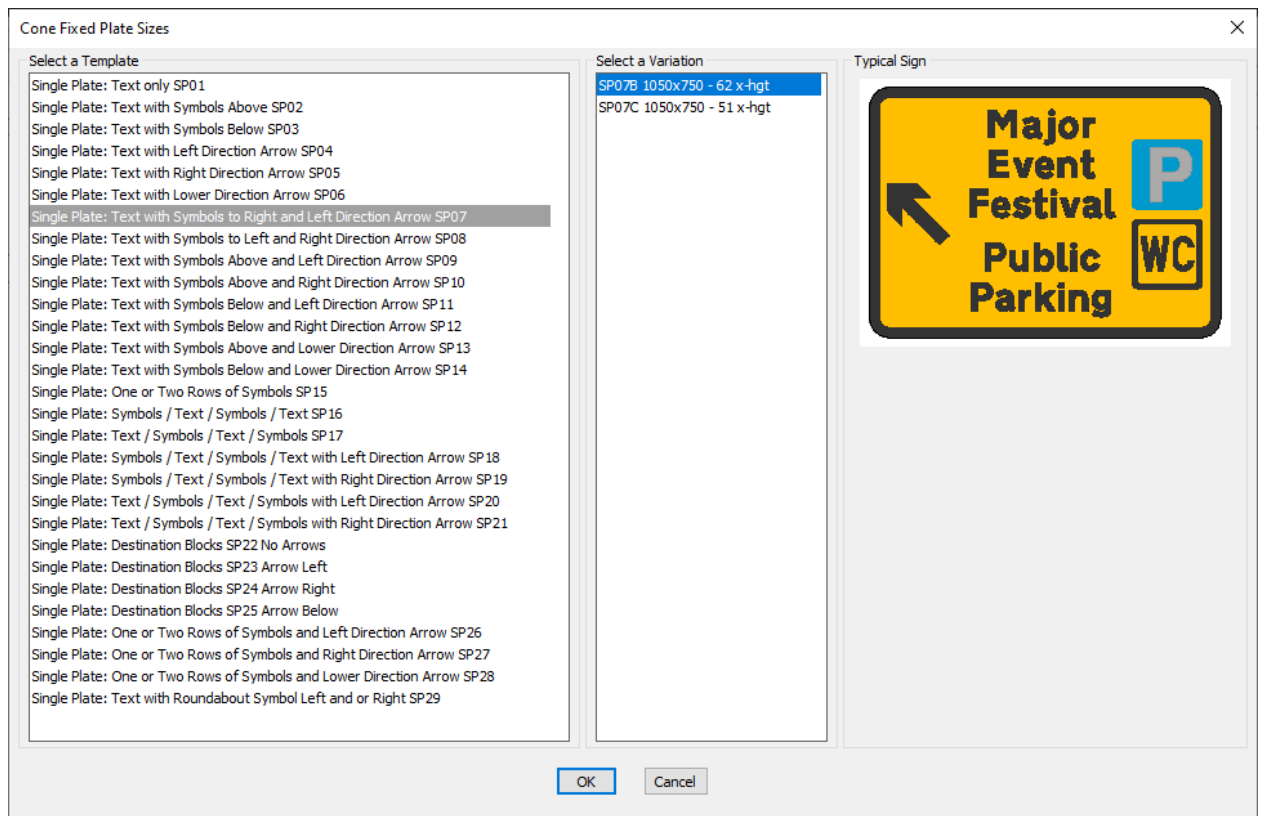
NONE: No arrow on the sign

Left Arrow: Arrow will be to the left of the text (if symbols are already on the left they will be switched to the right)

Right Arrow: Arrow will be to the right of the text (if symbols are already on the right they will be switched to the left)

Lower Arrow: The arrow will be positioned below the text - if this template sign layout allows





If the alternate template chosen has more elements than just lines of text, the symbol icons and directions arrow symbols will be shown in the dialog around the text input boxes

Symbols




NONE

NONE

NONE

Scale

1

VERTICAL SPACE BETWEEN

Block Spacing

Line Spacing

Edit Legend Text

Festival build>->up

deliveries only

Line space

0

0

0

0.0

0.0

0.0

0.0

% of X-Hgt

100

100

100

100

100

100

100

Justify the legend

Left

Centre

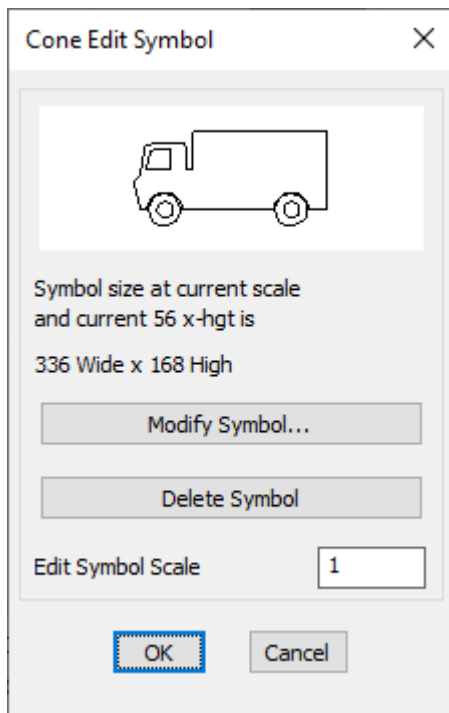
Arrow



Clicking on any of the symbol images allows you to swap or erase that symbol/icon on the sign

CONE 12 User Guide: Conesoftware.com July 7th 2026

82



Justify Legend

Left: Aligns the lines of text to the left

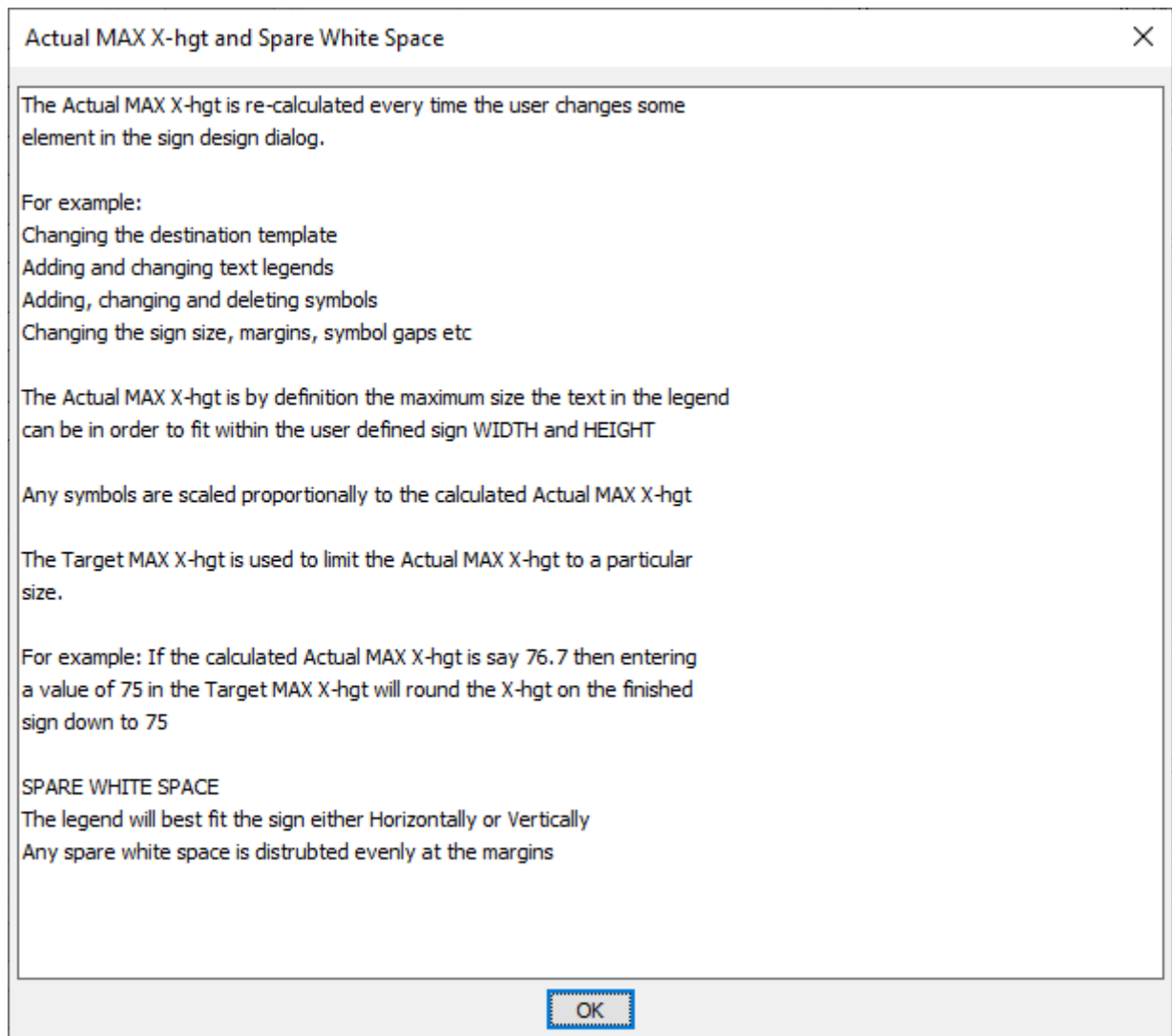
Centre: Aligns the lines of text to centre justified

Justify the stack

Right: Aligns the elements to the right

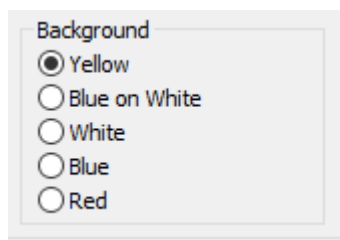
Centre: Aligns the elements to be centred

The image shows a dialog box with two main sections: 'Justify the legend' and 'Justify the stack'.
 In the 'Justify the legend' section, there are two radio buttons: 'Left' (which is selected) and 'Centre'.
 In the 'Justify the stack' section, there are two radio buttons: 'Right' (which is selected) and 'Centre'.
 Below these sections, there are three boxes:
 1. 'Target MAX X-Hgt' with a text box containing '100'.
 2. 'Actual MAX X-Hgt' with the text '** 46.15 **'.
 3. 'Spare space at the margins:' containing the text 'There is 143 mm spare VERTICAL space' and 'There is 0 mm spare HORIZONTAL space'.
 A help icon (a blue circle with a question mark) is located in the bottom right corner.



Background

The background colour of the sign can be selected from the radio buttons, this automatically select the text colour



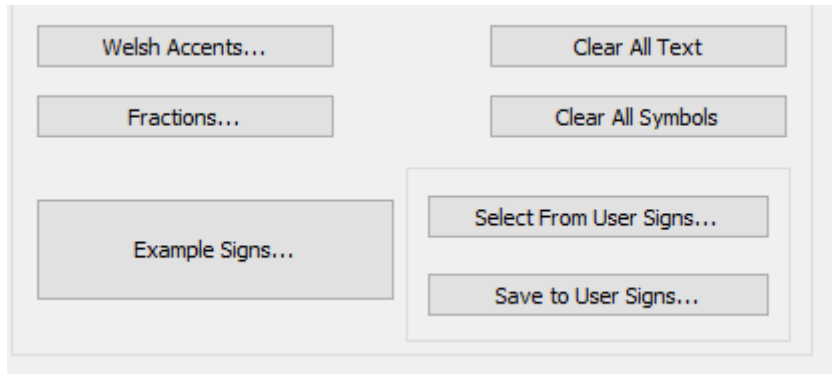
Yellow: Yellow plate face with black text

Blue on White: White plate face with blue text

White: White plate face with black text

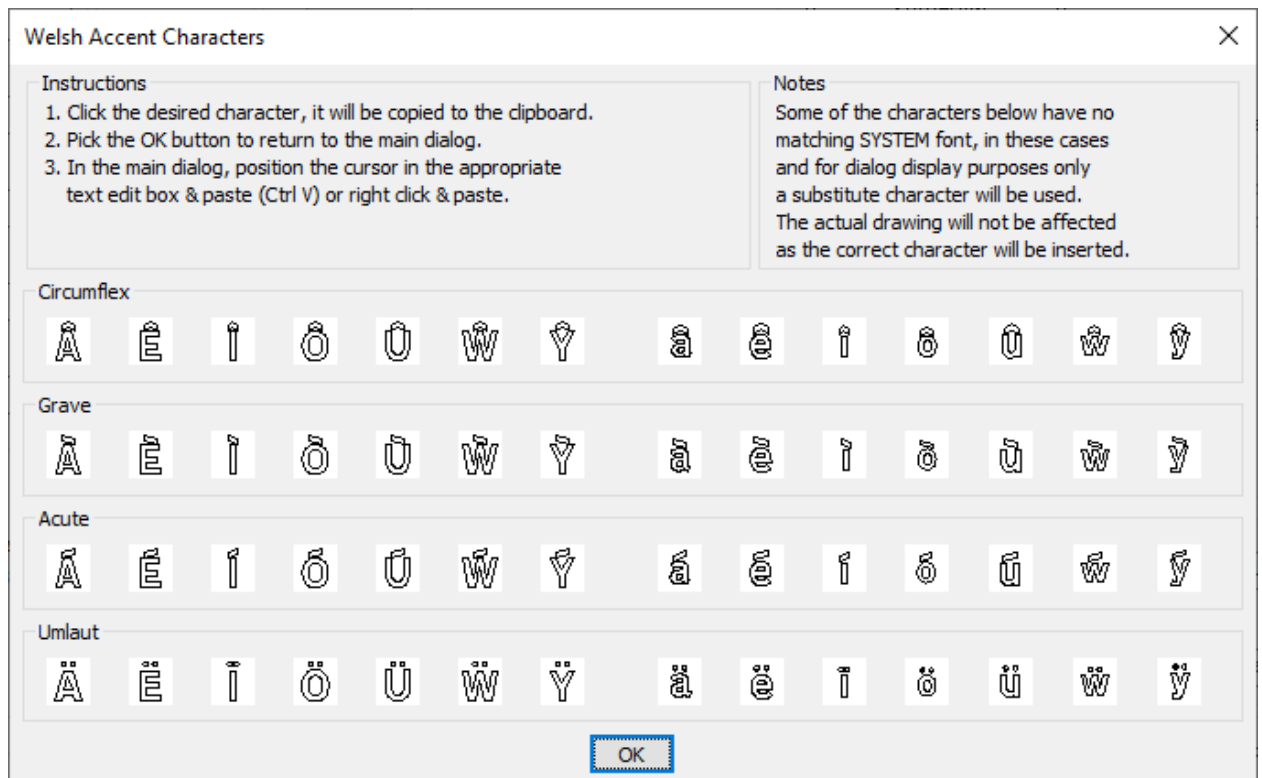
Blue: Blue plate face with white text

Red: Red plate face with white text



Welsh Accents

With limited keyboard options, to type additional characters to display on signs, click the Welsh Accents... button and you will get the following dialog:



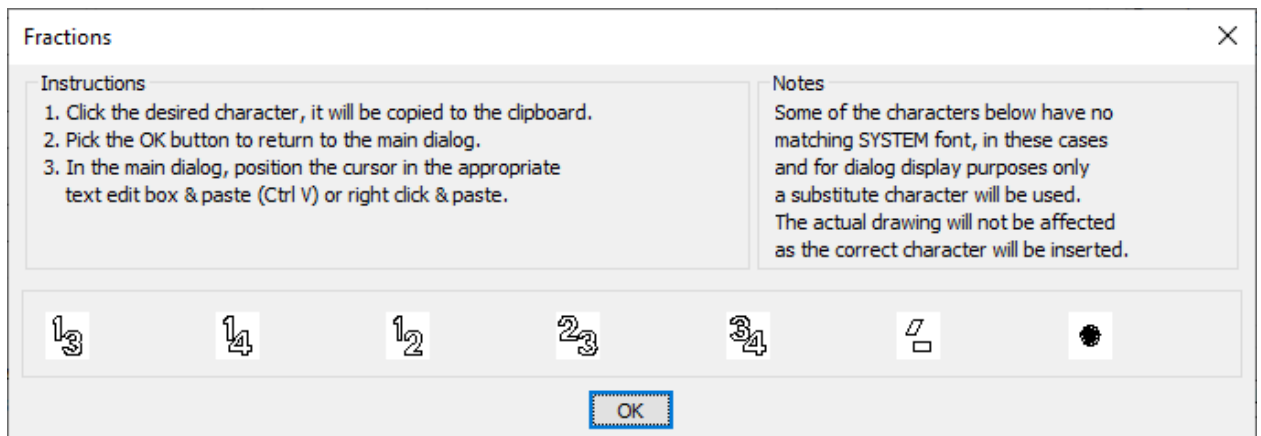
Instructions are displayed in the dialog:

1. Click the desired character, it will be copied to the clipboard
2. Pick the OK button, to return to the sign design dialog
3. in the main dialog, position the cursor in the appropriate text edit box and paste (Ctrl & V) or click the mouse right button and select paste

If the character does not seem to display correctly in the text edit box, this will be a limitation of the system font, if you click the preview button in the main dialog, you will see the actual text font character,.

Fractions

As with welsh characters above, you may want fraction characters that are not on your keyboard to display on signs, click the Fractions... button and you will get the following dialog:



Instructions are displayed in the dialog:

1. Click the desired character, it will be copied to the clipboard
2. Pick the OK button, to return to the sign design dialog
3. in the main dialog, position the cursor in the appropriate text edit box and paste (Ctrl & V) or click the mouse right button and select paste

If the character does not seem to display correctly in the text edit box, this will be a limitation of the system font, if you click the preview button in the main dialog, you will see the actual text font character,.

Clear All Text

The "Clear All Text" button will simply delete all the text the from the current stack being edited, there is no warning that you wish to confirm deletion

Clear All Symbols

The "Clear All Symbols" button will remove all the symbols from the current stack being edited, it will not remove direction arrows that are part of the template.

There is no warning that you wish to confirm deletion

Example Signs

This button shows the same dialog as the change stack template button, but in a display only mode, by clicking on any of the signs, you will not change the current template.

Select from User Signs....

Cone Custom Signs - USER Libraries

User Sign Data Libraries

FP2_ORIGINAL.DAT

Library Housekeeping

Copy Library

Rename Library

Delete Library

Sign Type Filter

☒ Single Panel ☐ Double Panel ☐ Triple Panel ☐ Left Flag ☐ Right Flag ☐ All Types

Select a User Sign from the list

PROJECT	DATE	DESCRIPTION
A-PROJECT-EXAMPLE	09/10/2021-16:54:23	Schedule 13.9 : Temporary Information

List Housekeeping

Delete selected line

Rename selected line

OK Cancel

Using this dialog, you can reload signs you have previously saved, then make changes to them to insert onto the current drawing.

Save to User Signs

Save User Sign Data

User Data Libraries

FP2_ORIGINAL.DAT

This tool saves the current sign data to the selected User Data Library

The saved sign data can be retrieved later via the [Select From User Library] button in the main dialog window

To proceed:

1. Select the Library to save to
2. Enter project name (optional)
3. Enter a meaningful sign description
4. Press the OK button

Project: Event Festival

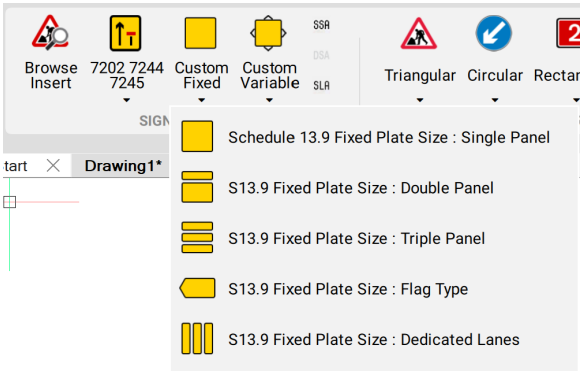
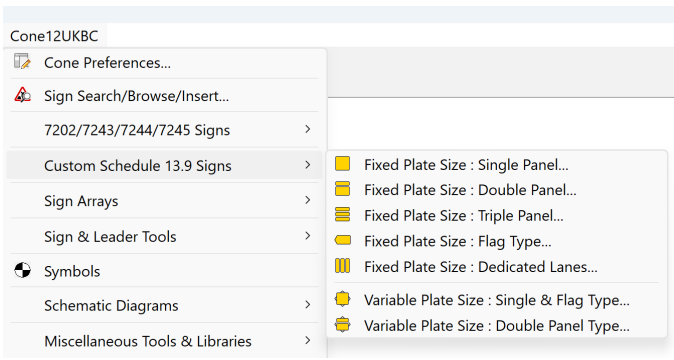
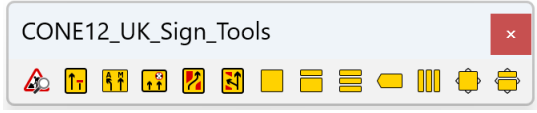
Description: Schedule 13-9 : Temporary Information

OK Cancel

This button allows you to save the current sign being designed to your User library, the instructions are in the dialog:

1. Select the Library to save to from the list on the left of the dialog
2. Enter a project name
3. Enter a (meaningful) sign description
4. Press the OK button

Custom Schedule 13.9 Signs - Fixed Plate Size: Double Panel

Command: CUKFPDOUBLE RIBBON: CONE12 Main: SIGN TOOLS	
CONE12UKBC Pull Down Menu	
CONE12_UK_Sign_Tools	

Typical Signs



The Size of the double panel fixed plate sign is specified by entering values in the edit boxes at top right of the main dialog box.

Width: width of sign in millimetres

Height : height of sign in millimetres

Border: width of the sign border around the plate edge in millimetres

Top/Bottom/Left/Right Margin: minimum width of the margin between the border and the text or graphic elements on the sign in millimetres

Symbol Gap: an additional (margin) distance around the edge or any arrow or symbol added the the sign

Stack Divider: the internal border width between top and bottom panels

Spare Vertical Space

Expand All Stacks: .

Do Not Expand Top Stack: .

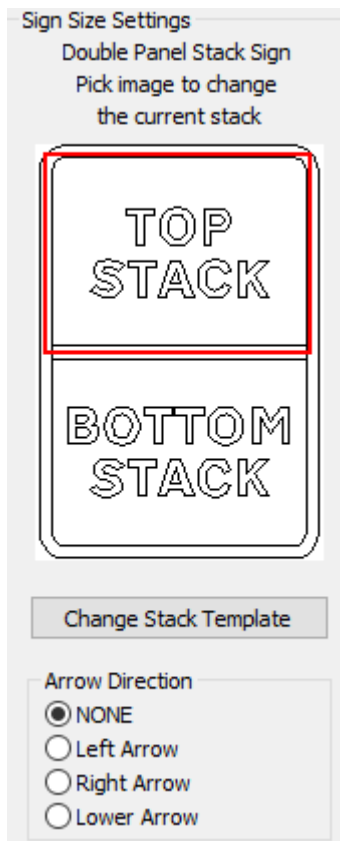
Do Not Expand Bottom Stack: .

Border / X-hgt

The border to X-height tool contains a selection of ideal settings of the border, margins, symbol gaps etc. to suit a particular X-height (plus or minus 6mm)

For example if the actual calculated Max x-height is approx. 56 x-hgt and the current border setting is 30mm, then selecting the 25/66 radio button will change the border, margin and symbols gaps settings to suit a 25mm border and 66 x-hgt (plus or minus 6mm)

This will in most cases result in a larger calculated Max X-Hgt



Arrow Direction

The position of the arrow element on the sign can be chosen from the options:

NONE: No arrow on the sign

Left Arrow: Arrow will be to the left of the text (if symbols are already on the left they will be switched to the right)

Right Arrow: Arrow will be to the right of the text (if symbols are already on the right they will be switched to the left)

Lower Arrow: The arrow will be positioned below the text - if this template sign layout allows

Change Stack Template

The layout of the main elements - the text and either arrows and/or symbols can be chosen from a variety of preset templates.

The upper and lower panel stacks have their template design specified separately, in the screen grab above. the TOP stack is selected - shown by the red border, click on the area labelled TOP STACK or BOTTOM STACK to change between the two parts of the sign.

Clicking on the template icon to select that layout for the stack you are editing.



If the alternate template chosen has more elements than just lines of text, the symbol icons and directions arrow symbols will be shown in the dialog around the text input boxes

Symbols




NONE

NONE

NONE

Scale

1

VERTICAL SPACE BETWEEN

Block Spacing

Line Spacing

Edit Legend Text

Festival build>->up

deliveries only

Line space

0

0

0

0.0

0.0

0.0

0.0

0.0

% of X-Hgt

100

100

100

100

100

100

100

100

Justify the legend

Left

Centre

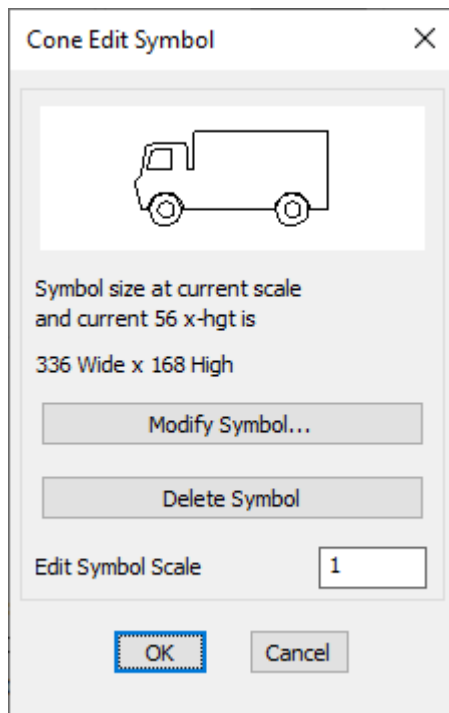
Arrow



Clicking on any of the symbol images allows you to swap or erase that symbol/icon on the sign

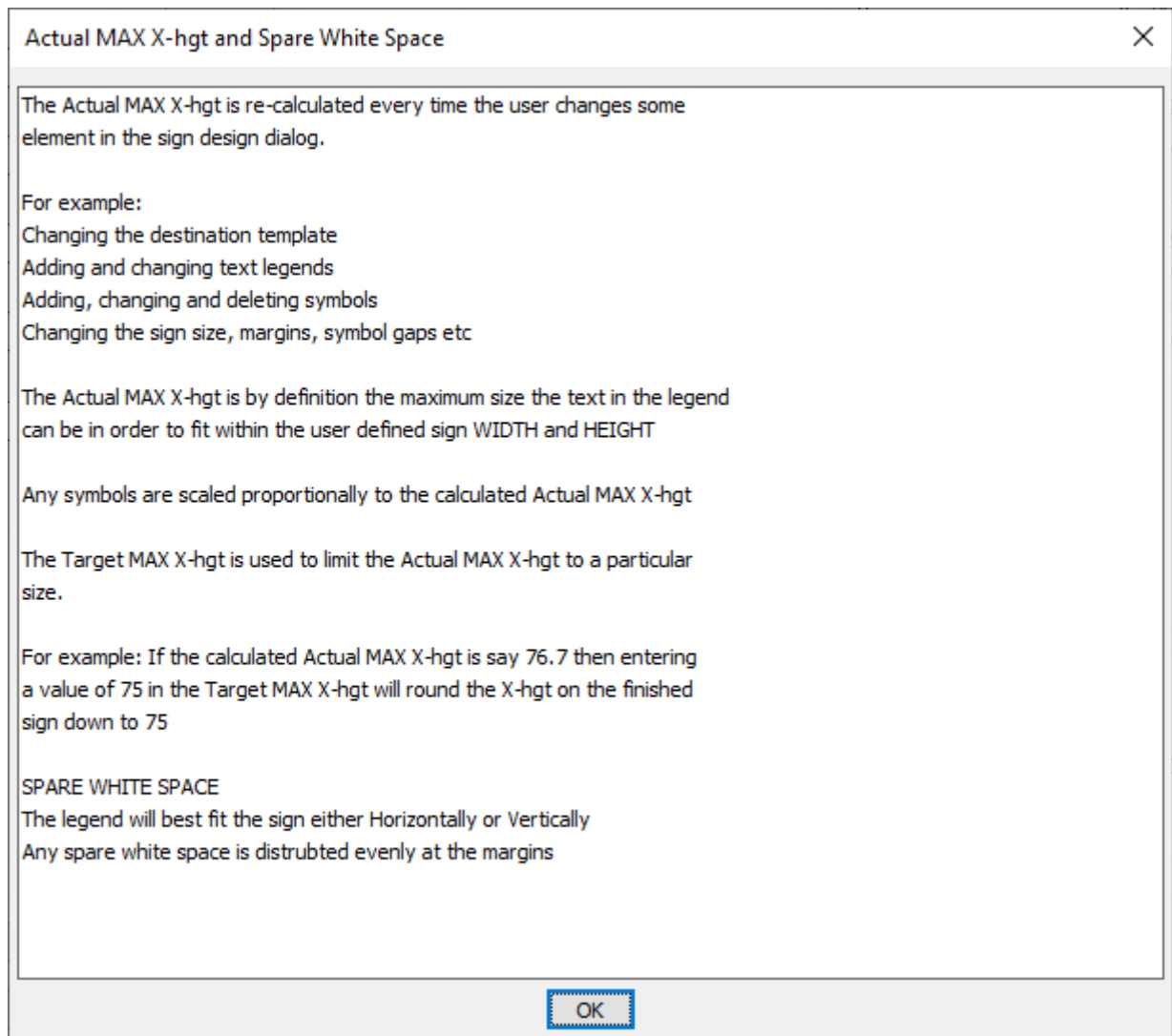
CONE 12 User Guide: Conesoftware.com July 7th 2026

96



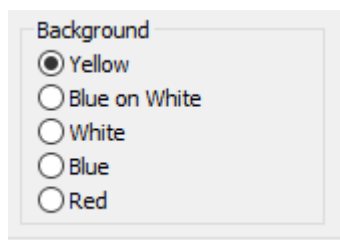
Target MAX X-Hgt 100	Actual MAX X-Hgt ** 49.15 **	Spare space at the margins: There is 0 mm spare VERTICAL space There is 35 mm HORIZONTAL space





Background

The background colour of the sign can be selected from the radio buttons, this automatically select the text colour



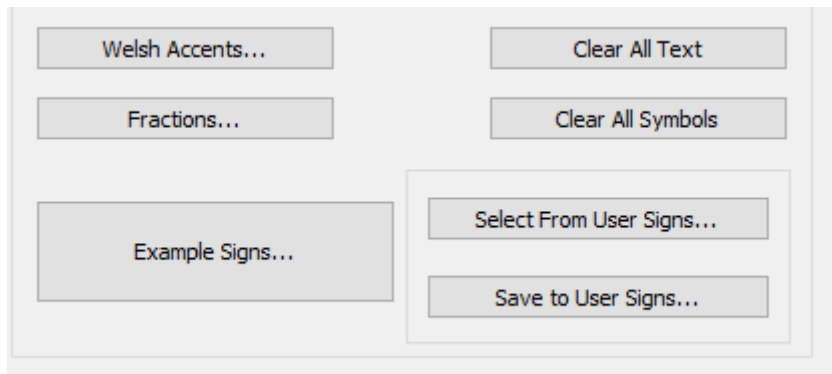
Yellow: Yellow plate face with black text

Blue on White: White plate face with blue text

White: White plate face with black text

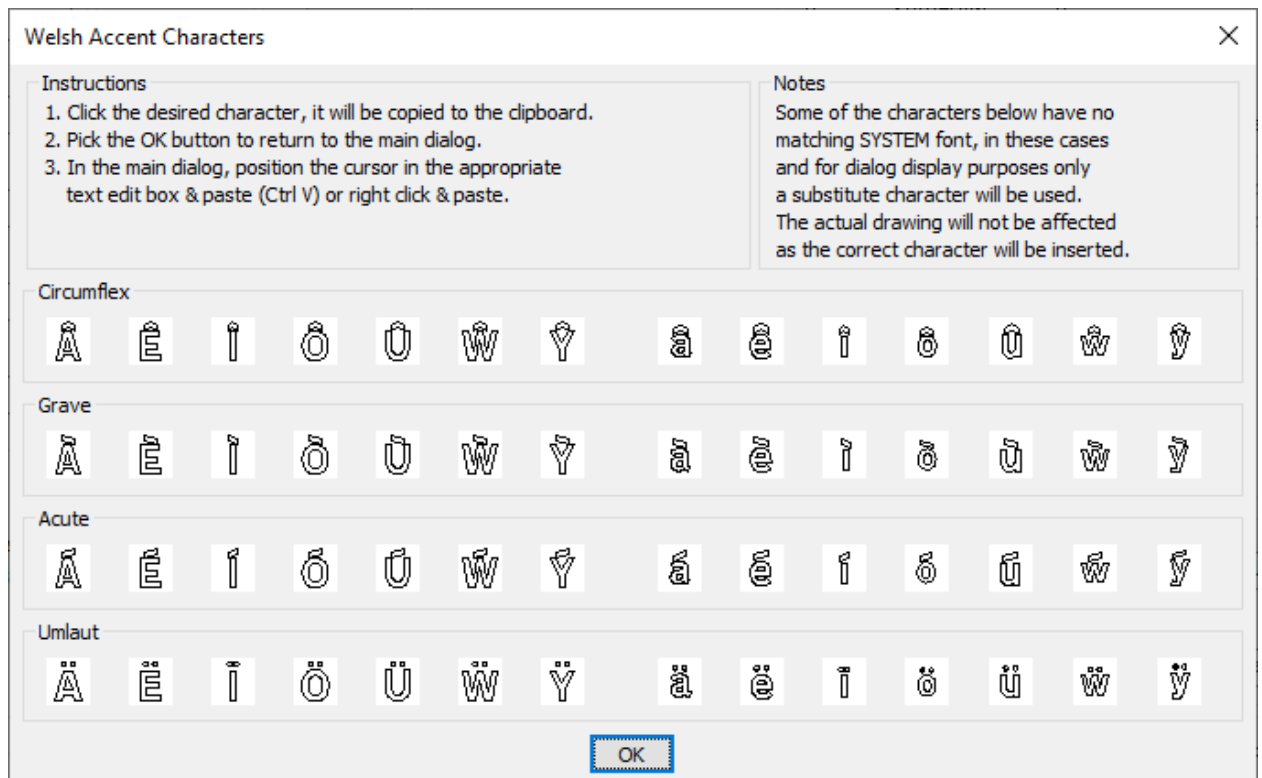
Blue: Blue plate face with white text

Red: Red plate face with white text



Welsh Accents

With limited keyboard options, to type additional characters to display on signs, click the Welsh Accents... button and you will get the following dialog:



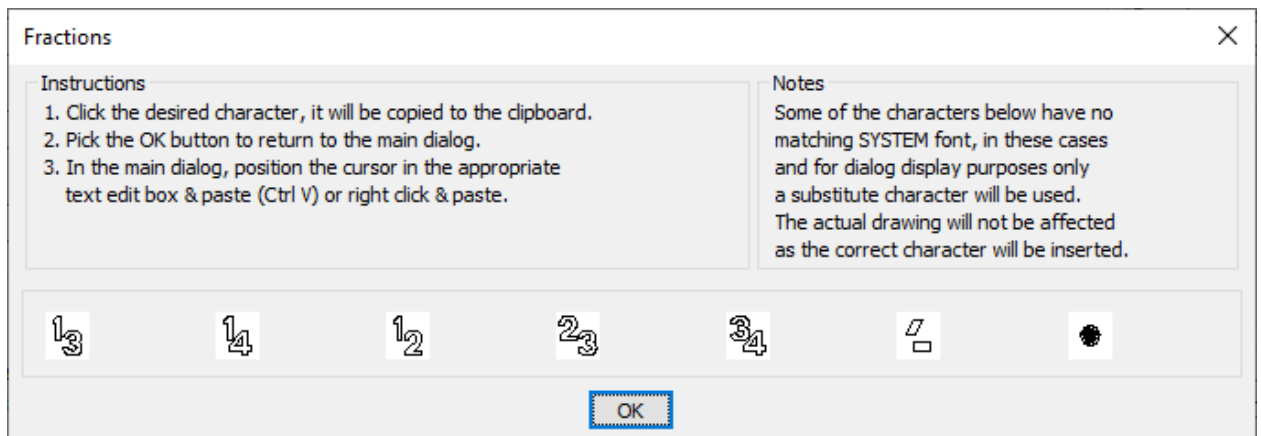
Instructions are displayed in the dialog:

1. Click the desired character, it will be copied to the clipboard
2. Pick the OK button, to return to the sign design dialog
3. in the main dialog, position the cursor in the appropriate text edit box and paste (Ctrl & V) or click the mouse right button and select paste

If the character does not seem to display correctly in the text edit box, this will be a limitation of the system font, if you click the preview button in the main dialog, you will see the actual text font character,.

Fractions

As with welsh characters above, you may want fraction characters that are not on your keyboard to display on signs, click the Fractions... button and you will get the following dialog:



Instructions are displayed in the dialog:

1. Click the desired character, it will be copied to the clipboard
2. Pick the OK button, to return to the sign design dialog
3. in the main dialog, position the cursor in the appropriate text edit box and paste (Ctrl & V) or click the mouse right button and select paste

If the character does not seem to display correctly in the text edit box, this will be a limitation of the system font, if you click the preview button in the main dialog, you will see the actual text font character,.

Clear All Text

The "Clear All Text" button will simply delete all the text the from the current stack being edited, there is no warning that you wish to confirm deletion

Clear All Symbols

The "Clear All Symbols" button will remove all the symbols from the current stack being edited, it will not remove direction arrows that are part of the template.

There is no warning that you wish to confirm deletion

Example Signs

This button shows the same dialog as the change stack template button, but in a display only mode, by clicking on any of the signs, you will not change the current template.

Select from User Signs....

Cone Custom Signs - USER Libraries

User Sign Data Libraries

FP2_ORIGINAL.DAT

Library Housekeeping

Copy Library

Rename Library

Delete Library

Sign Type Filter

☒ Single Panel ☐ Double Panel ☐ Triple Panel ☐ Left Flag ☐ Right Flag ☐ All Types

Select a User Sign from the list

PROJECT	DATE	DESCRIPTION
A-PROJECT-EXAMPLE	09/10/2021-16:54:23	Schedule 13.9 : Temporary Information

List Housekeeping

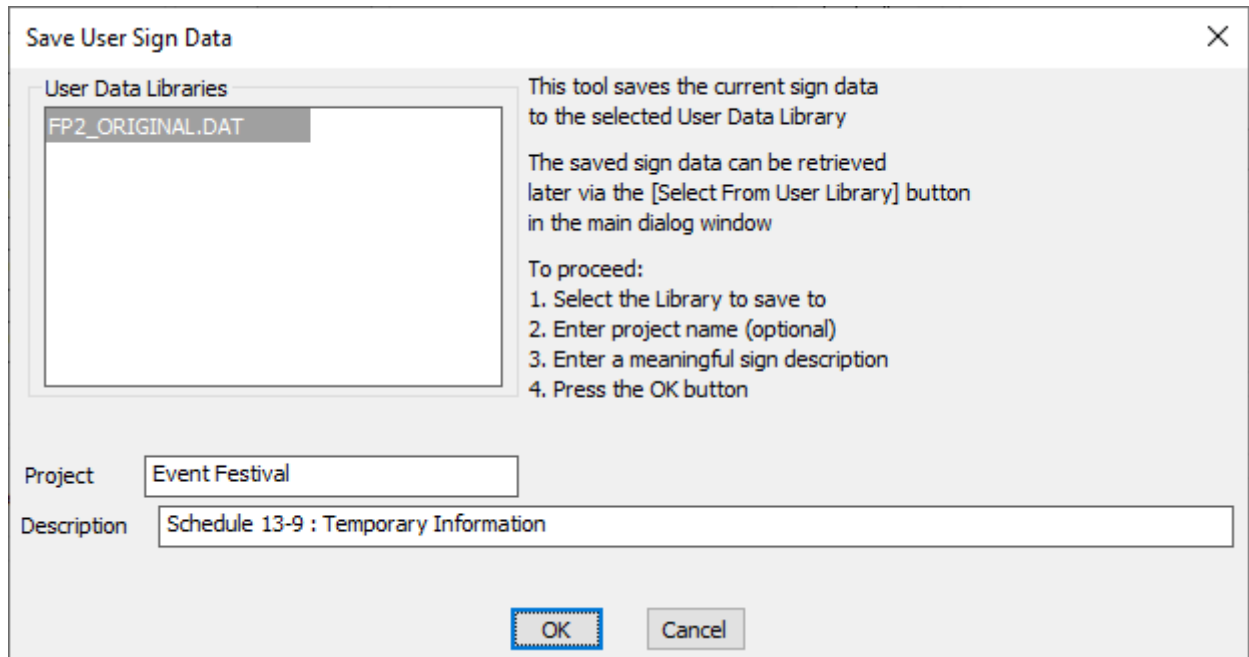
Delete selected line

Rename selected line

OK Cancel

Using this dialog, you can reload signs you have previously saved, then make changes to them to insert onto the current drawing.

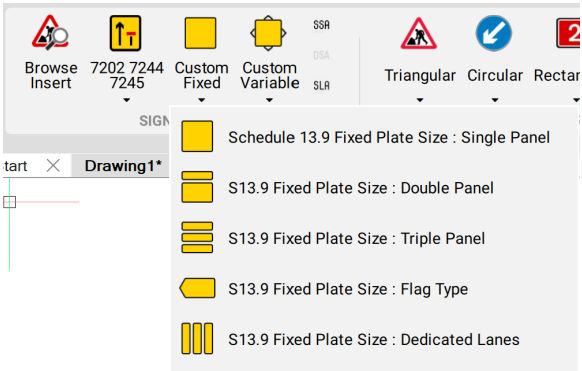
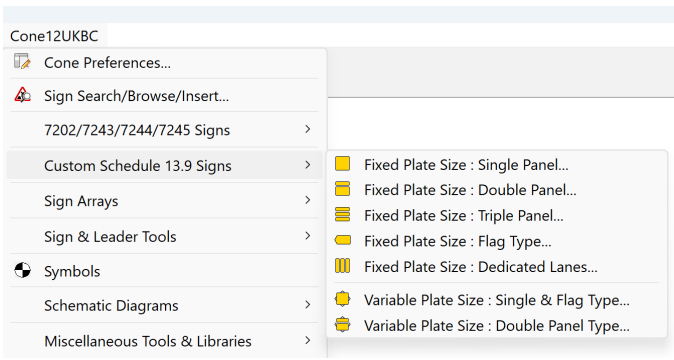
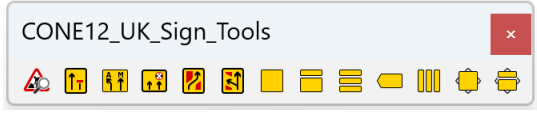
Save to User Signs



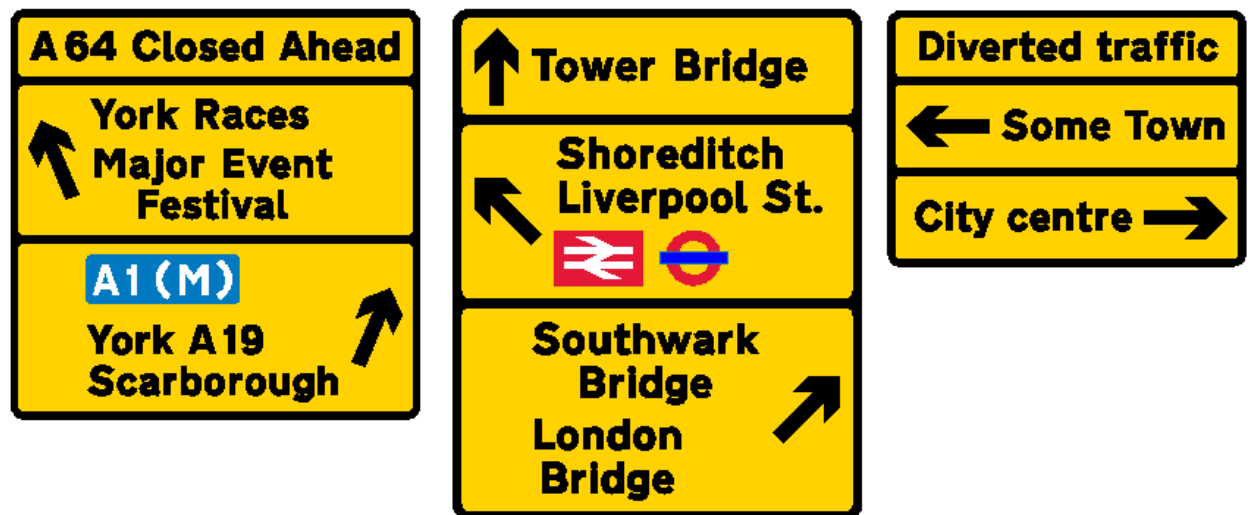
This button allows you to save the current sign being designed to your User library, the instructions are in the dialog:

1. Select the Library to save to from the list on the left of the dialog
2. Enter a project name
3. Enter a (meaningful) sign description
4. Press the OK button

Custom Schedule 13.9 Signs - Fixed Plate Size: Triple Panel

Command: CUKFPTRIPLE RIBBON: CONE12 Main: SIGN TOOLS	 The screenshot shows the 'SIGN TOOLS' ribbon in the software. The 'Custom Schedule 13.9 Signs' dropdown menu is open, displaying several options: 'Schedule 13.9 Fixed Plate Size : Single Panel', 'S13.9 Fixed Plate Size : Double Panel', 'S13.9 Fixed Plate Size : Triple Panel', 'S13.9 Fixed Plate Size : Flag Type', and 'S13.9 Fixed Plate Size : Dedicated Lanes'. Each option is accompanied by a small icon representing the sign's appearance.
CONE12UKBC Pull Down Menu	 The screenshot shows the 'Cone12UKBC' pull-down menu. It includes options like 'Cone Preferences...', 'Sign Search/Browse/Insert...', '7202/7243/7244/7245 Signs', 'Custom Schedule 13.9 Signs', 'Sign Arrays', 'Sign & Leader Tools', 'Symbols', 'Schematic Diagrams', and 'Miscellaneous Tools & Libraries'. The 'Custom Schedule 13.9 Signs' option is expanded, showing a sub-menu with icons and labels for 'Fixed Plate Size : Single Panel...', 'Fixed Plate Size : Double Panel...', 'Fixed Plate Size : Triple Panel...', 'Fixed Plate Size : Flag Type...', 'Fixed Plate Size : Dedicated Lanes...', 'Variable Plate Size : Single & Flag Type...', and 'Variable Plate Size : Double Panel Type...'.
CONE12_UK_Sign_Tools	 The screenshot shows the 'CONE12_UK_Sign_Tools' toolbar. It contains various icons for sign creation and editing, including a red 'X' icon in the top right corner.

Typical Signs



Cone Fixed Plate Signs: Text only template SP01

Edit Legend Text

Some Road

CLOSED

Line space

0

0

0

0.0

0.0

0.0

0.0

% of X-Hgt

100

100

100

100

100

100

100

Target MAX X-Hgt

100

Actual MAX X-Hgt

** 75.42 **

Spare space at the margins:

There is 0 mm VERTICAL space

There is 241 mm HORIZONTAL space

Welsh Accents...
Fractions...
Example Signs...

Clear All Text
Clear All Symbols
Select From User Signs...
Save to User Signs...

Sign Insert Settings

Insert scale

1

Ref distance

0

☒ Include leaders

☒ Group signs & leader

Leader Tip & Angle

☐ Dog Leg Leader
☐ Ortho Leader

Click to change

Sign Size Settings

Triple Panel Stack Sign
Pick image to change the current stack

TOP STACK

MIDDLE STACK

BOTTOM STACK

Change Stack Template

Arrow Direction

☒ NONE
☐ Left Arrow
☐ Right Arrow
☐ Lower Arrow

Flag Direction

☐ Left
☐ Right

Background

☒ Yellow
☐ Blue on White
☐ White
☐ Blue
☐ Red

Border / X-hgt

☐ 40 / 106
☐ 35 / 93
☐ 30 / 80
☐ 25 / 66
☐ 20 / 53
☐ 15 / 40

Width

1200

Height

1200

Border

25

Top Margin

40

Bottom Margin

25

Left Margin

40

Right Margin

40

Symbol Gap

40

Stack Divider

25

Spare Vertical Space

☐ Expand all stacks
☒ Do not expand top stack
☐ Do not expand bottom stack

Ref / Label:

13-9

Description

Schedule 13 : Temporary Sign

Sign Rotation Method

With Leaders

Default Rotation

☒ Zero
☐ Align
☐ Perp

Without Leaders

☐ Specify on screen

Preset rotation:

0

OK

Cancel

Preview...

The Size of the triple panel fixed plate sign is specified by entering values in the edit boxes at top right of the main dialog box.

Width: width of sign in millimetres

Height : height of sign in millimetres

Border: width of the sign border around the plate edge in millimetres

Top/Bottom/Left/Right Margin: minimum width of the margin between the border and the text or graphic elements on the sign in millimetres

Symbol Gap: an additional (margin) distance around the edge or any arrow or symbol added the the sign

Stack Divider: the internal border width between top and bottom panels



Spare Vertical Space

Expand All Stacks: .

Do Not Expand Top Stack: .

Do Not Expand Bottom Stack: .

Border / X-hgt

The border to X-height tool contains a selection of ideal settings of the border, margins, symbol gaps etc. to suit a particular X-height (plus or minus 6mm)

For example if the actual calculated Max x-height is approx. 56 x-hgt and the current border setting is 30mm, then selecting the 25/66 radio button will change the border, margin and symbols gaps settings to suit a 25mm border and 66 x-hgt (plus or minus 6mm)

This will in most cases result in a larger calculated Max X-Hgt

Arrow Direction

☒ NONE

☐ Left Arrow

☐ Right Arrow

☐ Lower Arrow

Flag Direction

☐ Left ☐ Right

Background

☒ Yellow

☐ Blue on White

☐ White

☐ Blue

☐ Red

Arrow Direction

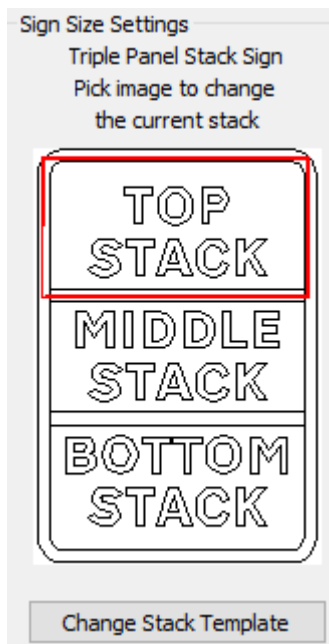
The position of the arrow element on the sign can be chosen from the options:

NONE: No arrow on the sign

Left Arrow: Arrow will be to the left of the text (if symbols are already on the left they will be switched to the right)

Right Arrow: Arrow will be to the right of the text (if symbols are already on the right they will be switched to the left)

Lower Arrow: The arrow will be positioned below the text - if this template sign layout allows



Change Stack Template

The layout of the main elements - the text and either arrows and/or symbols can be chosen from a variety of preset templates.

The upper, middle and lower panel stacks have their template design specified separately, in the screen grab above. the TOP stack is selected - shown by the red border, click on the area labelled TOP STACK, MIDDLE STACK or BOTTOM STACK to change between the two parts of the sign.

Clicking on the template icon to select that layout.



If the alternate template chosen has more elements than just lines of text, the symbol icons and directions arrow symbols will be shown in the dialog around the text input boxes

Symbols





NONE

NONE

NONE

Scale

1

VERTICAL SPACE BETWEEN

☒ Block Spacing

☐ Line Spacing

Edit Legend Text

Text with

symbols above

Line space

0

0

0

0

0

0

0

0

% of X-Hgt

100

100

100

100

100

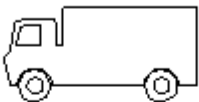
100

100

100

Clicking on any of the symbol images allows you to swap or erase that symbol/icon on the sign

Cone Edit Symbol



Symbol size at current scale
and current 56 x-hgt is

336 Wide x 168 High

Modify Symbol...

Delete Symbol

Edit Symbol Scale

1

OK

Cancel

Target MAX X-Hgt 100	Actual MAX X-Hgt ** 49.15 **	Spare space at the margins: There is 0 mm spare VERTICAL space There is 35 mm HORIZONTAL space	

Actual MAX X-hgt and Spare White Space

The Actual MAX X-hgt is re-calculated every time the user changes some element in the sign design dialog.

For example:

- Changing the destination template
- Adding and changing text legends
- Adding, changing and deleting symbols
- Changing the sign size, margins, symbol gaps etc

The Actual MAX X-hgt is by definition the maximum size the text in the legend can be in order to fit within the user defined sign WIDTH and HEIGHT

Any symbols are scaled proportionally to the calculated Actual MAX X-hgt

The Target MAX X-hgt is used to limit the Actual MAX X-hgt to a particular size.

For example: If the calculated Actual MAX X-hgt is say 76.7 then entering a value of 75 in the Target MAX X-hgt will round the X-hgt on the finished sign down to 75

SPARE WHITE SPACE

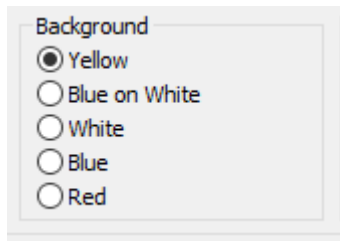
The legend will best fit the sign either Horizontally or Vertically

Any spare white space is distributed evenly at the margins

OK

Background

The background colour of the sign can be selected from the radio buttons, this automatically select the text colour



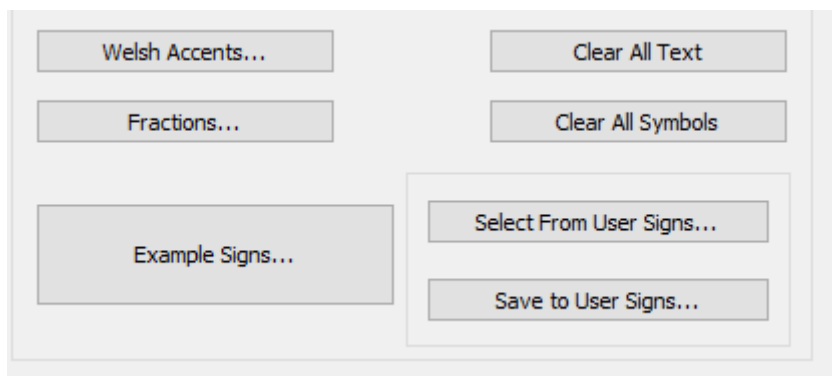
Yellow: Yellow plate face with black text

Blue on White: White plate face with blue text

White: White plate face with black text

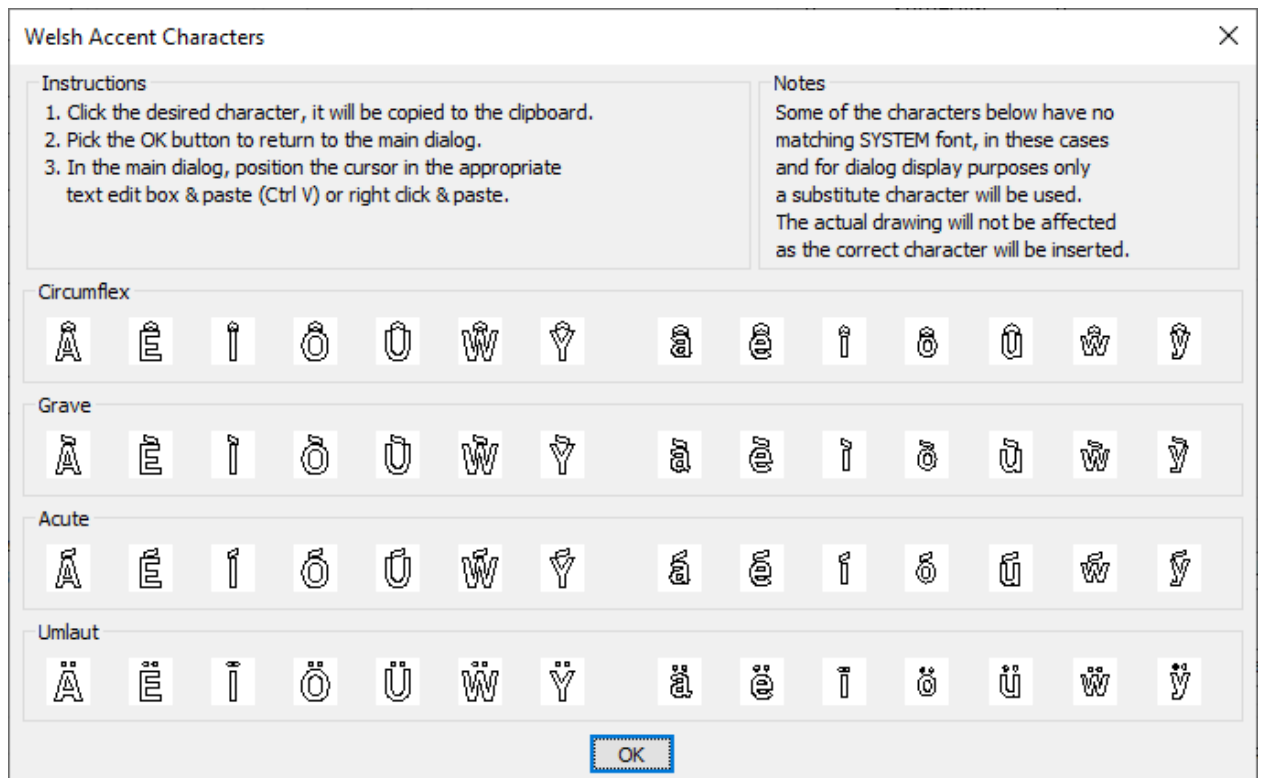
Blue: Blue plate face with white text

Red: Red plate face with white text



Welsh Accents

With limited keyboard options, to type additional characters to display on signs, click the Welsh Accents... button and you will get the following dialog:



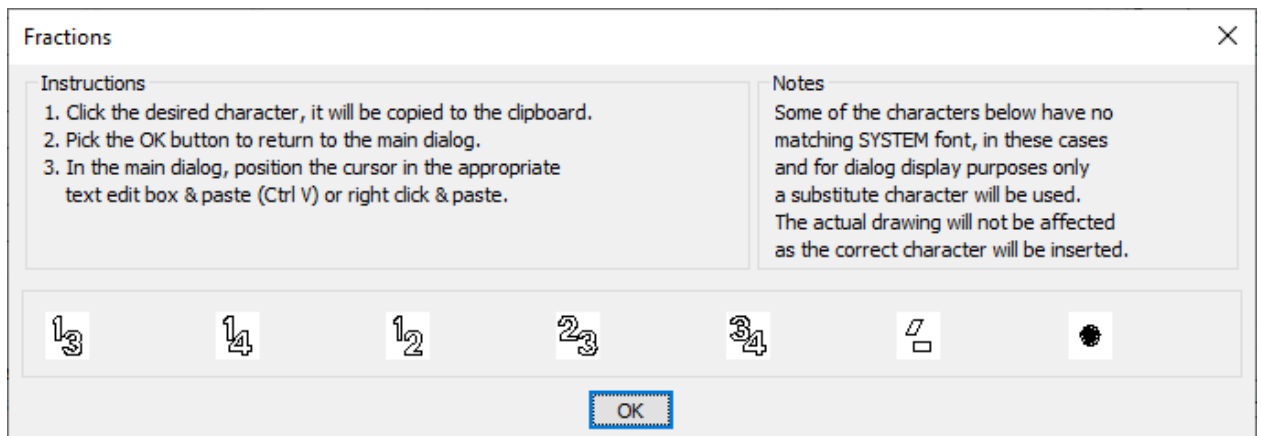
Instructions are displayed in the dialog:

1. Click the desired character, it will be copied to the clipboard
2. Pick the OK button, to return to the sign design dialog
3. in the main dialog, position the cursor in the appropriate text edit box and paste (Ctrl & V) or click the mouse right button and select paste

If the character does not seem to display correctly in the text edit box, this will be a limitation of the system font, if you click the preview button in the main dialog, you will see the actual text font character,.

Fractions

As with welsh characters above, you may want fraction characters that are not on your keyboard to display on signs, click the Fractions... button and you will get the following dialog:



Instructions are displayed in the dialog:

1. Click the desired character, it will be copied to the clipboard
2. Pick the OK button, to return to the sign design dialog
3. in the main dialog, position the cursor in the appropriate text edit box and paste (Ctrl & V) or click the mouse right button and select paste

If the character does not seem to display correctly in the text edit box, this will be a limitation of the system font, if you click the preview button in the main dialog, you will see the actual text font character,.

Clear All Text

The "Clear All Text" button will simply delete all the text the from the current stack being edited, there is no warning that you wish to confirm deletion

Clear All Symbols

The "Clear All Symbols" button will remove all the symbols from the current stack being edited, it will not remove direction arrows that are part of the template.

There is no warning that you wish to confirm deletion

Example Signs

This button shows the same dialog as the change stack template button, but in a display only mode, by clicking on any of the signs, you will not change the current template.

Select from User Signs....

Cone Custom Signs - USER Libraries

User Sign Data Libraries

FP2_ORIGINAL.DAT

Library Housekeeping

Copy Library

Rename Library

Delete Library

Sign Type Filter

☒ Single Panel ☐ Double Panel ☐ Triple Panel ☐ Left Flag ☐ Right Flag ☐ All Types

Select a User Sign from the list

PROJECT	DATE	DESCRIPTION
A-PROJECT-EXAMPLE	09/10/2021-16:54:23	Schedule 13.9 : Temporary Information

List Housekeeping

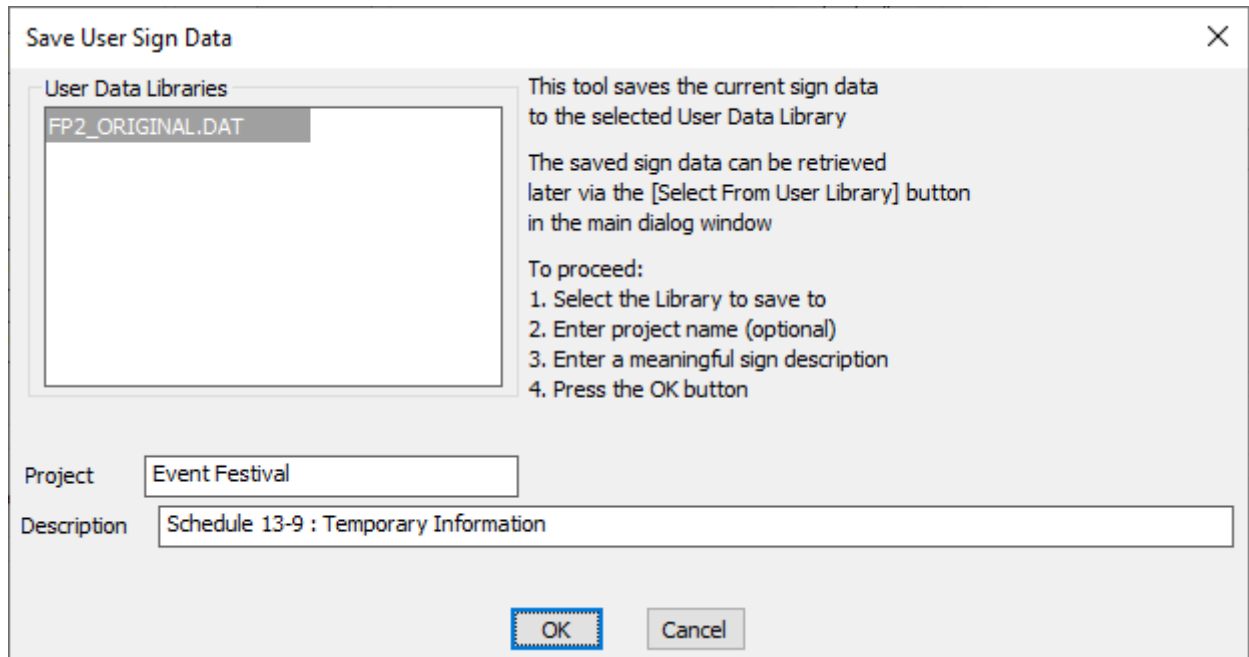
Delete selected line

Rename selected line

OK Cancel

Using this dialog, you can reload signs you have previously saved, then make changes to them to insert onto the current drawing.

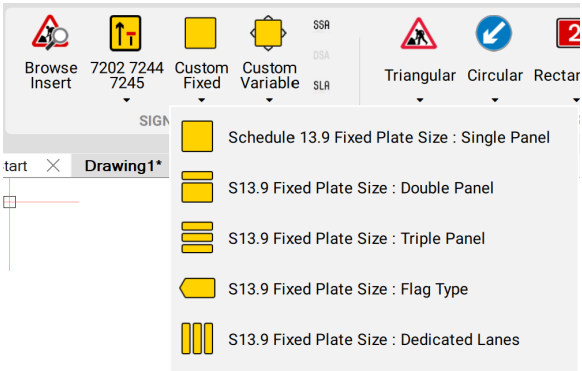
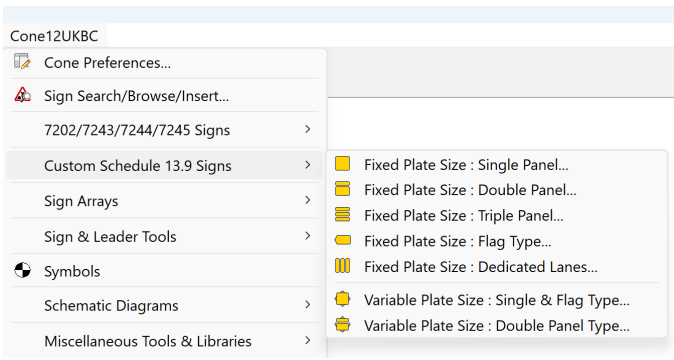
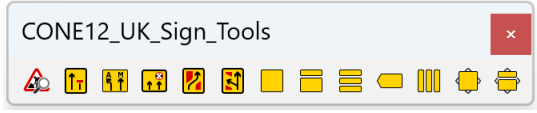
Save to User Signs



This button allows you to save the current sign being designed to your User library, the instructions are in the dialog:

1. Select the Library to save to from the list on the left of the dialog
2. Enter a project name
3. Enter a (meaningful) sign description
4. Press the OK button

Custom Schedule 13.9 Signs - Fixed Plate Size: Flag Type

Command: CUKFPFLAG RIBBON: CONE12 Main: SIGN TOOLS	
CONE12UKBC Pull Down Menu	
CONE12_UK_Sign_Tools	

Typical Signs



Cone Fixed Plate Signs: Chevron : Text only - Template LP01

Edit Legend Text

Text	Line space	% of X-Hgt
M1 North	0	100
diverted	0	100
traffic	0	100
	0	100
	0	100
	0	100
	0	100
	0	100

Justify the legend

☐ Left ☒ Centre

Target MAX X-Hgt: 100
Actual MAX X-Hgt: ** 59.17 **

Spare space at the margins:
There is 0 mm spare VERTICAL space
There is 214 mm spare HORIZONTAL space

Sign Size Settings

Left Flag Sign

Width: 1050
Height: 450
Border: 20
Top Margin: 35
Bottom Margin: 20
Left Margin: 188
Right Margin: 35
Symbol Gap: 35
Stack Divider: 20

Change Stack Template

Arrow Direction

☐ NONE
☐ Left Arrow
☐ Right Arrow
☐ Lower Arrow

Flag Direction

☒ Left ☐ Right

Background

☒ Yellow
☐ Blue on White
☐ White
☐ Blue
☐ Red

Border / X-hgt

☐ 40 / 106
☐ 35 / 93
☐ 30 / 80
☐ 25 / 66
☐ 20 / 53
☐ 15 / 40

Ref / Label: 13.9
Description: Schedule 13.9 : Temporary Information

Sign Insert Settings

Insert scale: 1
Ref distance: 0

☒ Include leaders
☒ Group signs & leader

Leader Tip & Angle

☐ Dog Leg Leader
☐ Ortho Leader

Sign Rotation Method

With Leaders

Default Rotation: ☒ Zero ☐ Align ☐ Perp

Without Leaders

☐ Specify on screen
Preset rotation: 0

Buttons: OK, Cancel, Preview...

The size of the single panel fixed plate sign is specified by entering values in the edit boxes at top right of the main dialog box.

Width: width of sign in millimetres

Height : height of sign in millimetres

Border: width of the sign border around the plate edge in millimetres

Top/Bottom/Left/Right Margin: minimum width of the margin between the border and the text or graphic elements on the sign in millimetres

Symbol Gap: an additional (margin) distance around the edge or any arrow or symbol added the the sign

Width	1050
Height	750
Border	20
Top Margin	35
Bottom Margin	20
Left Margin	30
Right Margin	30
Symbol Gap	35
Stack Divider	20

Spare Vertical Space

☒ Expand all stacks
☐ Do not expand top stack
☐ Do not expand bottom stack

Border / X-hgt

☐ 40 / 106
☐ 35 / 93
☐ 30 / 80
☐ 25 / 66
☐ 20 / 53
☐ 15 / 40



Border / X-hgt

The border to X-height tool contains a selection of ideal settings of the border, margins, symbol gaps etc. to suit a particular X-height (plus or minus 6mm)

For example if the actual calculated Max x-height is approx. 56 x-hgt and the current border setting is 30mm, then selecting the 25/66 radio button will change the border, margin and symbols gaps settings to suit a 25mm border and 66 x-hgt (plus or minus 6mm)

This will in most cases result in a larger calculated Max X-Hgt



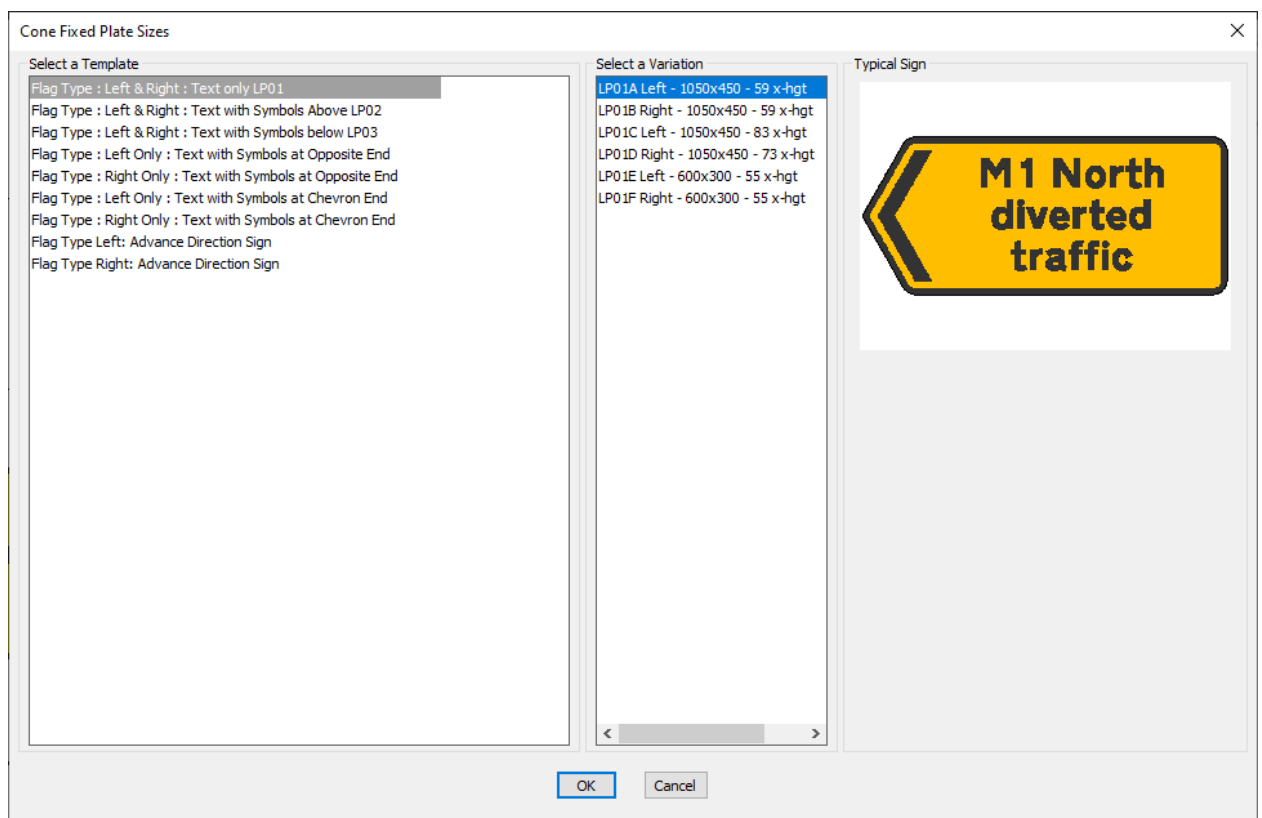
Flag Direction

There are no arrow icons selectable, but you can change the flag pointer to Left or Right using the radio buttons.

Change Stack Template

The layout of the main elements - the text and either arrows and/or symbols can be chosen from a variety of preset templates.

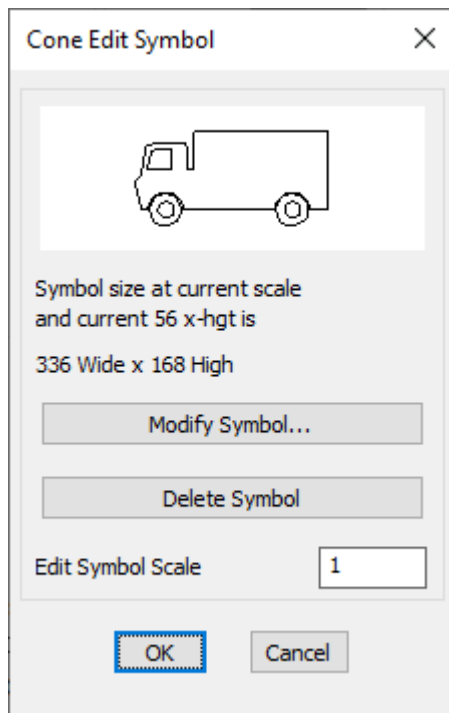
Clicking on the template titles on the left list, and any variation in the central list will display a sample preview image at the right of the box.



If the alternate template chosen has more elements than just lines of text, the symbol icons and directions arrow symbols will be shown in the dialog around the text input boxes

Symbols	Edit Legend Text	Line space	% of X-Hgt
	Leeds	0	100
NONE	Bradford	0	100
NONE		0	100
Scale 1 		0.0	100
		0.0	100
		0.0	100
		0.0	100
		0.0	100

Clicking on any of the symbol images allows you to swap or erase that symbol/icon on the sign

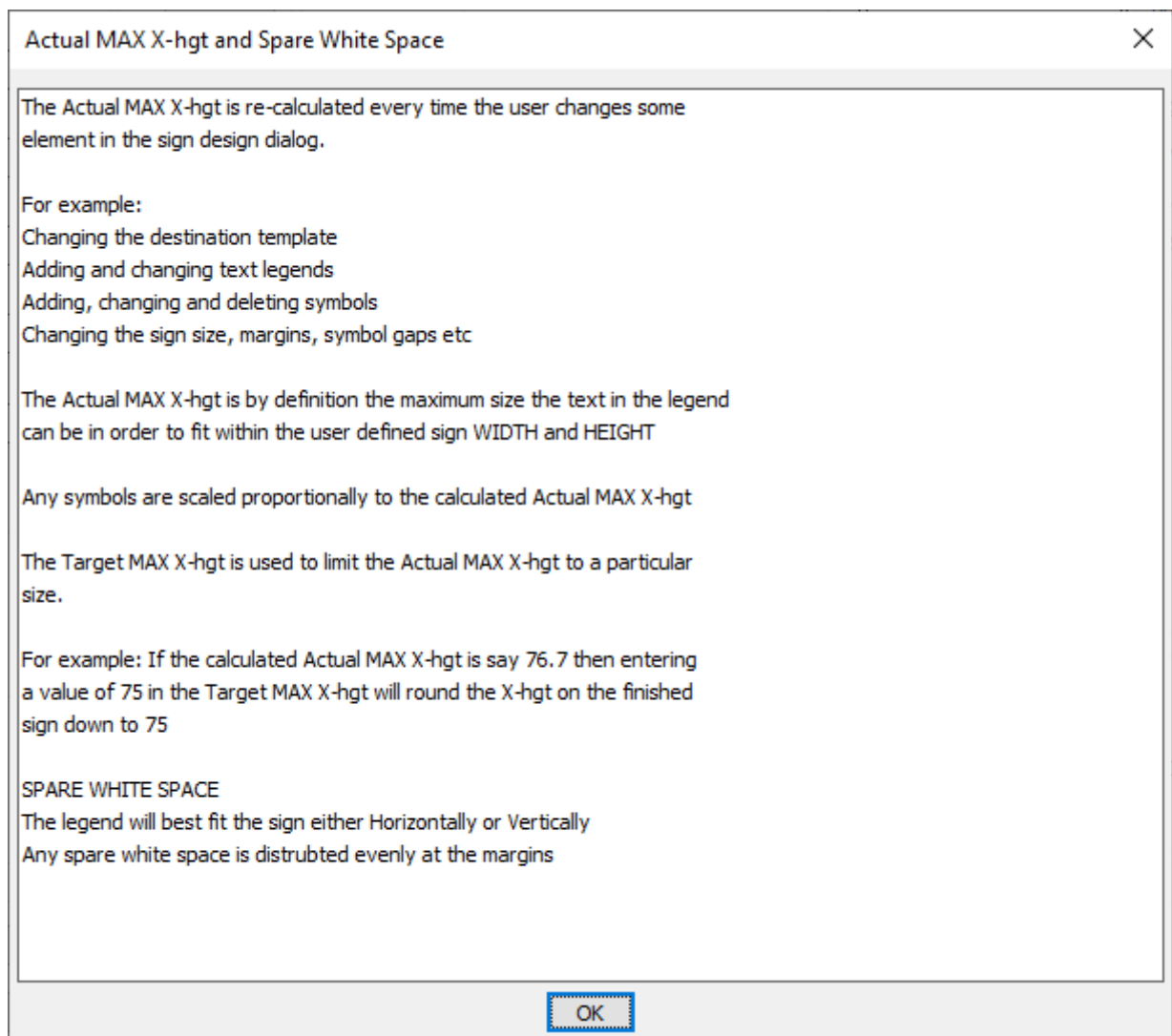


Justify Legend

Left: Aligns the lines of text to the left

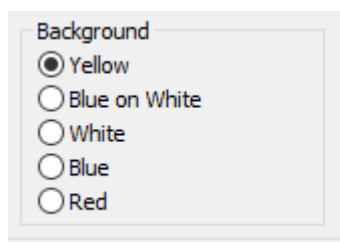
Centre: Aligns the lines of text to centre justified





Background

The background colour of the sign can be selected from the radio buttons, this automatically select the text colour



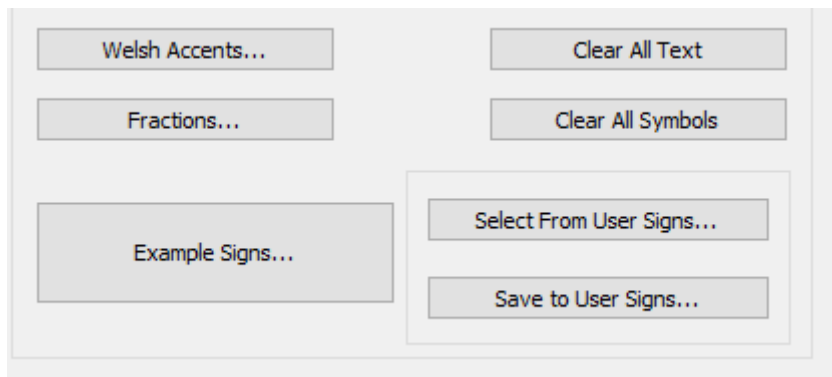
Yellow: Yellow plate face with black text

Blue on White: White plate face with blue text

White: White plate face with black text

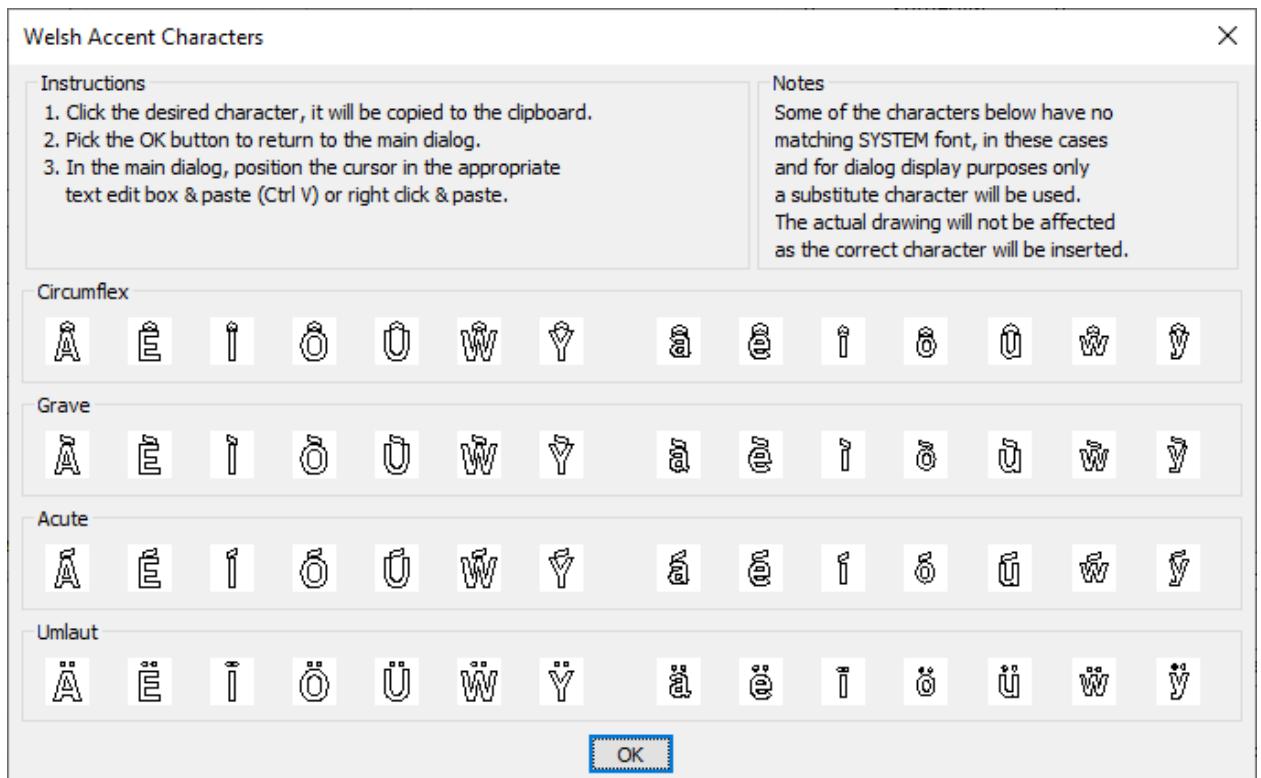
Blue: Blue plate face with white text

Red: Red plate face with white text



Welsh Accents

With limited keyboard options, to type additional characters to display on signs, click the Welsh Accents... button and you will get the following dialog:



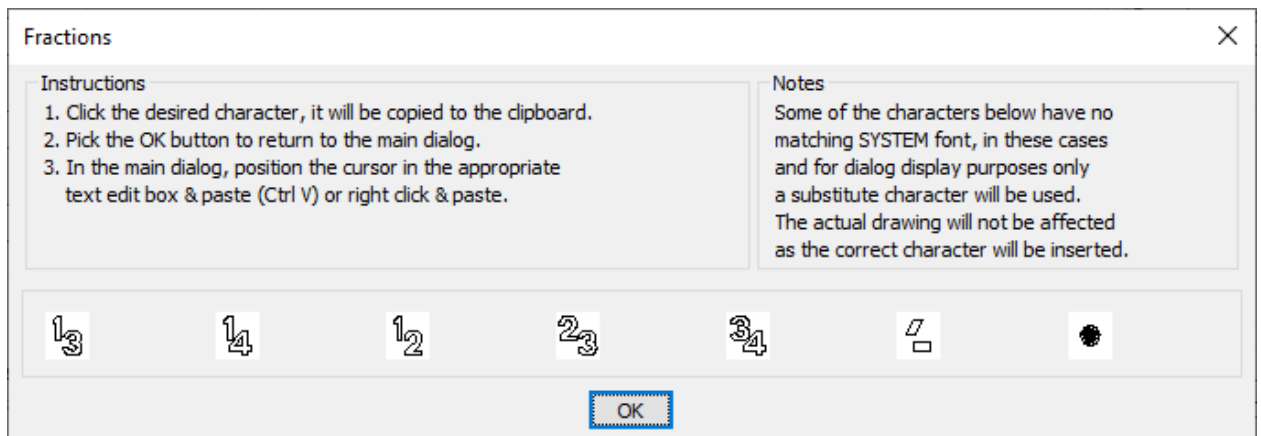
Instructions are displayed in the dialog:

1. Click the desired character, it will be copied to the clipboard
2. Pick the OK button, to return to the sign design dialog
3. in the main dialog, position the cursor in the appropriate text edit box and paste (Ctrl & V) or click the mouse right button and select paste

If the character does not seem to display correctly in the text edit box, this will be a limitation of the system font, if you click the preview button in the main dialog, you will see the actual text font character,.

Fractions

As with welsh characters above, you may want fraction characters that are not on your keyboard to display on signs, click the Fractions... button and you will get the following dialog:



Instructions are displayed in the dialog:

1. Click the desired character, it will be copied to the clipboard
2. Pick the OK button, to return to the sign design dialog
3. in the main dialog, position the cursor in the appropriate text edit box and paste (Ctrl & V) or click the mouse right button and select paste

If the character does not seem to display correctly in the text edit box, this will be a limitation of the system font, if you click the preview button in the main dialog, you will see the actual text font character,.

Clear All Text

The "Clear All Text" button will simply delete all the text the from the current stack being edited, there is no warning that you wish to confirm deletion

Clear All Symbols

The "Clear All Symbols" button will remove all the symbols from the current stack being edited, it will not remove direction arrows that are part of the template.

There is no warning that you wish to confirm deletion

Example Signs

This button shows the same dialog as the change stack template button, but in a display only mode, by clicking on any of the signs, you will not change the current template.

Select from User Signs....

Cone Custom Signs - USER Libraries

User Sign Data Libraries

FP2_ORIGINAL.DAT

Library Housekeeping

Copy Library

Rename Library

Delete Library

Sign Type Filter

☒ Single Panel ☐ Double Panel ☐ Triple Panel ☐ Left Flag ☐ Right Flag ☐ All Types

Select a User Sign from the list

PROJECT	DATE	DESCRIPTION
A-PROJECT-EXAMPLE	09/10/2021-16:54:23	Schedule 13.9 : Temporary Information

List Housekeeping

Delete selected line

Rename selected line

OK Cancel

Using this dialog, you can reload signs you have previously saved, then make changes to them to insert onto the current drawing.

Save to User Signs

Save User Sign Data

User Data Libraries

- FP2_ORIGINAL.DAT

This tool saves the current sign data to the selected User Data Library

The saved sign data can be retrieved later via the [Select From User Library] button in the main dialog window

To proceed:

1. Select the Library to save to
2. Enter project name (optional)
3. Enter a meaningful sign description
4. Press the OK button

Project: Event Festival

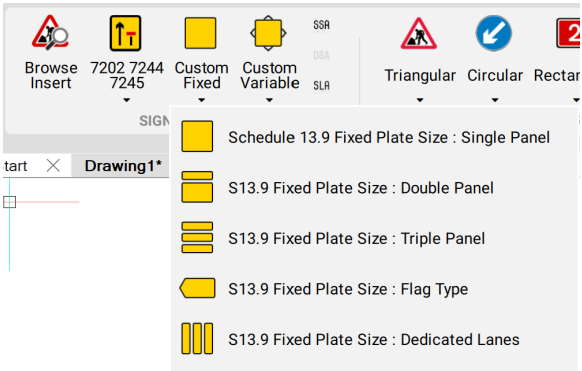
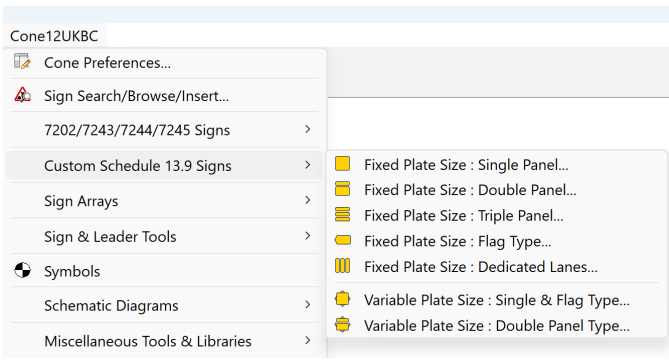
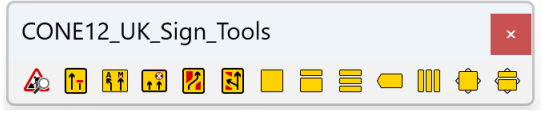
Description: Schedule 13-9 : Temporary Information

OK Cancel

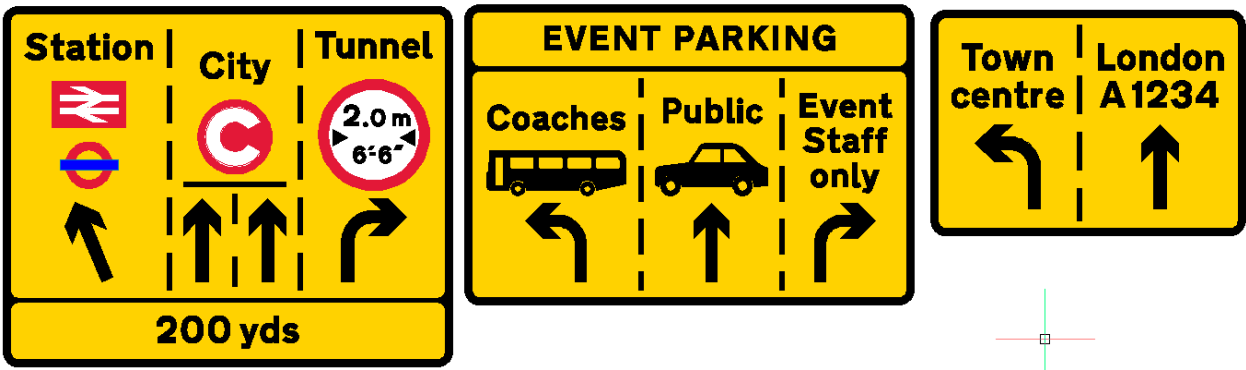
This button allows you to save the current sign being designed to your User library, the instructions are in the dialog:

1. Select the Library to save to from the list on the left of the dialog
2. Enter a project name
3. Enter a (meaningful) sign description
4. Press the OK button

Custom Schedule 13.9 Signs - Fixed Plate Size: Dedicated Lanes

Command: CCUKFPLANES RIBBON: CONE12 Main: SIGN TOOLS	
CONE12UKBC Pull Down Menu	
CONE12_UK_Sign_Tools	

Typical Signs



Cone Fixed Size Signs - Dedicated Lane Type - Destination Legend = Text + Symbols Below

Top Plate Text

☐ Optional Top Plate?

Bottom Plate Text

☐ Optional Bottom Plate?

To select the Current Zone

click on the image below

Destination Text & Line Space

Town 0

centre 0

Symbols

NONE NONE NONE

NONE NONE NONE

Scale 1

Justify Legend

☒ Centre ☐ Left

Current Selected Zone

Clear Text Entries

Clear Symbols

Change Destination Template...

Change Lane Arrows...

Number of Lane Zones

☒ Two ☐ Three ☐ Four

Sign Size Settings

Width 1050

Height 750

Border 25

Top Margin 40

Bottom Margin 25

Vertical Margins 40

Lane Lines & Bars 15

Symbol Gap 40

Stack Divider 15

Background

☒ Yellow ☐ White ☐ Blue on White

Border / X-hgt range +/- 6

☐ 40 / 106

☐ 35 / 93

☐ 30 / 80

☐ 25 / 66

☐ 20 / 53

☐ 15 / 40

Ref / Label: 13-9

Description

Schedule 13-9 : Temporary Sign

Target MAX X-Hgt 100

Actual MAX X-Hgt ** 63.53 **

Spare White Space:

There is 0 mm spare VERTICAL space at the margins

There is 80 mm HORIZONTAL space at the margins

Welsh Accents...

Fractions...

Example Signs...

Select From User Signs...

Save to User Signs...

Sign Insert Settings

Insert scale 1

Ref distance 0

☒ Include leaders

☒ Group signs & leader

Leader Tip & Angle

☐ Dog Leg Leader

☐ Ortho Leader

Click to change

Sign Rotation Method

With Leaders

Default Rotation

☒ Zero ☐ Align ☐ Perp

Without Leaders

☐ Specify on screen

Preset rotation: 0

OK Cancel Preview...

The size of the single panel fixed plate sign is specified by entering values in the edit boxes at top right of the main dialog box.

Width: width of sign in millimetres

Height : height of sign in millimetres

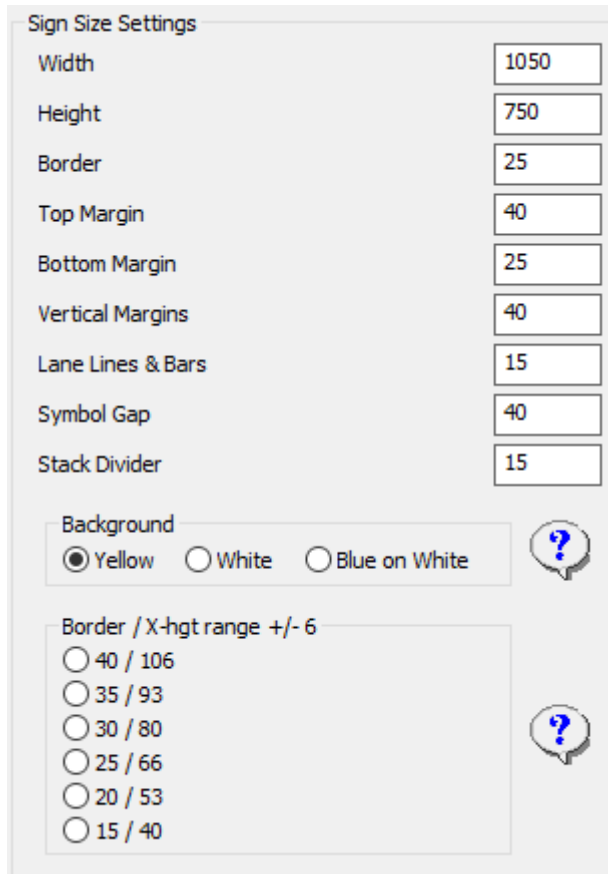
Border: width of the sign border around the plate edge in millimetres

Top/Bottom/Left/Right Margin: minimum width of the margin between the border and the text or graphic elements on the sign in millimetres

Lane Lines & Bars: width of vertical divider lines used on the sign in millimetres

Symbol Gap: an additional (margin) distance around the edge or any arrow or symbol added the the sign

Stack Divider: The width of the horizontal bars between top plate text and the lane zones and the bottom plate text, in millimetres



The image shows a 'Sign Size Settings' dialog box with various input fields and options. The fields are: Width (1050), Height (750), Border (25), Top Margin (40), Bottom Margin (25), Vertical Margins (40), Lane Lines & Bars (15), Symbol Gap (40), and Stack Divider (15). Below these fields are two sections: 'Background' with radio buttons for Yellow (selected), White, and Blue on White, and 'Border / X-hgt range +/- 6' with radio buttons for 40 / 106, 35 / 93, 30 / 80, 25 / 66, 20 / 53, and 15 / 40. There are two question mark icons in speech bubbles next to the Background and Border sections.

Setting	Value
Width	1050
Height	750
Border	25
Top Margin	40
Bottom Margin	25
Vertical Margins	40
Lane Lines & Bars	15
Symbol Gap	40
Stack Divider	15

Background
☒ Yellow ☐ White ☐ Blue on White

Border / X-hgt range +/- 6
☐ 40 / 106
☐ 35 / 93
☐ 30 / 80
☐ 25 / 66
☐ 20 / 53
☐ 15 / 40

Background

The base colour of the sign can be chosen from the following options, the text and bar colours are fixed dependant on this base colour.

Yellow: Yellow plate face with black text

White: White plate face with black text

Blue on White: White plate face with blue text

Border / X-hgt

The border to X-height tool contains a selection of ideal settings of the border, margins, symbol gaps etc. to suit a particular X-height (plus or minus 6mm)

For example if the actual calculated Max x-height is approx. 56 x-hgt and the current border setting is 30mm, then selecting the 25/66 radio button will change the border, margin and symbols gaps settings to suit a 25mm border and 66 x-hgt (plus or minus 6mm)

This will in most cases result in a larger calculated Max X-Hgt

Top & Bottom Plate Text

You can add up to two lines of text above or below the the lane icons & destination text

Check the boxes for optional plate text

Enter text into the two edit boxes as required.

Top Plate Text

☒ Optional Top Plate?

Bottom Plate Text

☒ Optional Bottom Plate?

To select the Current Zone

click on the image below

Left-pointing arrow image

Right-pointing arrow image

Destination Text

After selectin the zone you wish to label - click on the relevant section in the screen grab as shown above...

Up to four lines of text can be inserted - the line spacing between each pair of lines can be adjusted by entering values into the box at the right of the column

Each destination legend can be justified left or centred by selection of the appropriate radio button

There are circumstances where it is desirable to justify the legend left but have a particular two or three lines text entry centred, for example a place name associated with a symbol

If you surround the test lines with the @ character thus

@Queens
Hospital@

Then the text will be centred but also ranged left.



Destination Text & Line Space

Leeds	0
A 123	0
	0
	0

Justify Legend

☒ Centre ☐ Left

Current Selected Zone

Clear Text Entries

Clear Symbols

Change Destination Template...

Change Lane Arrows...

Number of Lane Zones

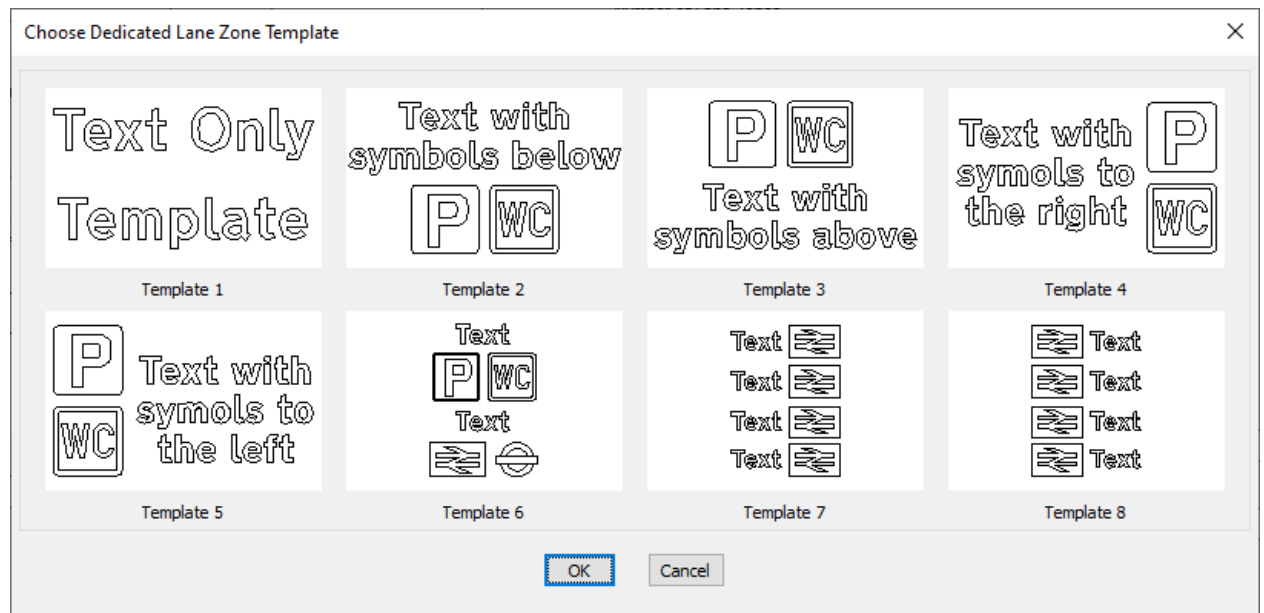
☒ Two ☐ Three ☐ Four

Clear Text Entries

Clear Symbols

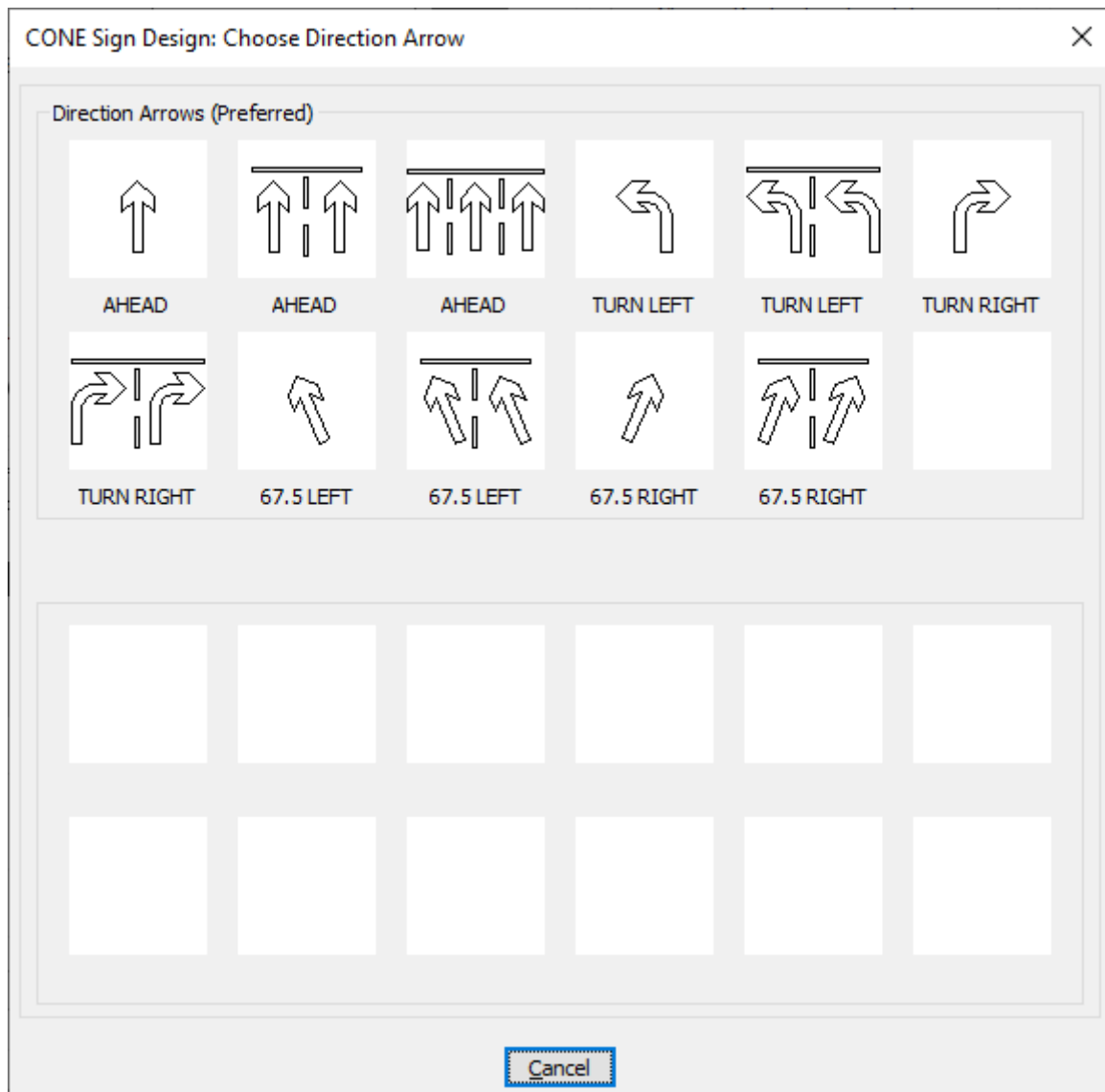
Change Destination Template...

clicking this button will display a sub dialog that allows you to change the template of the destination from one of the options displayed.



Change Lane Arrows

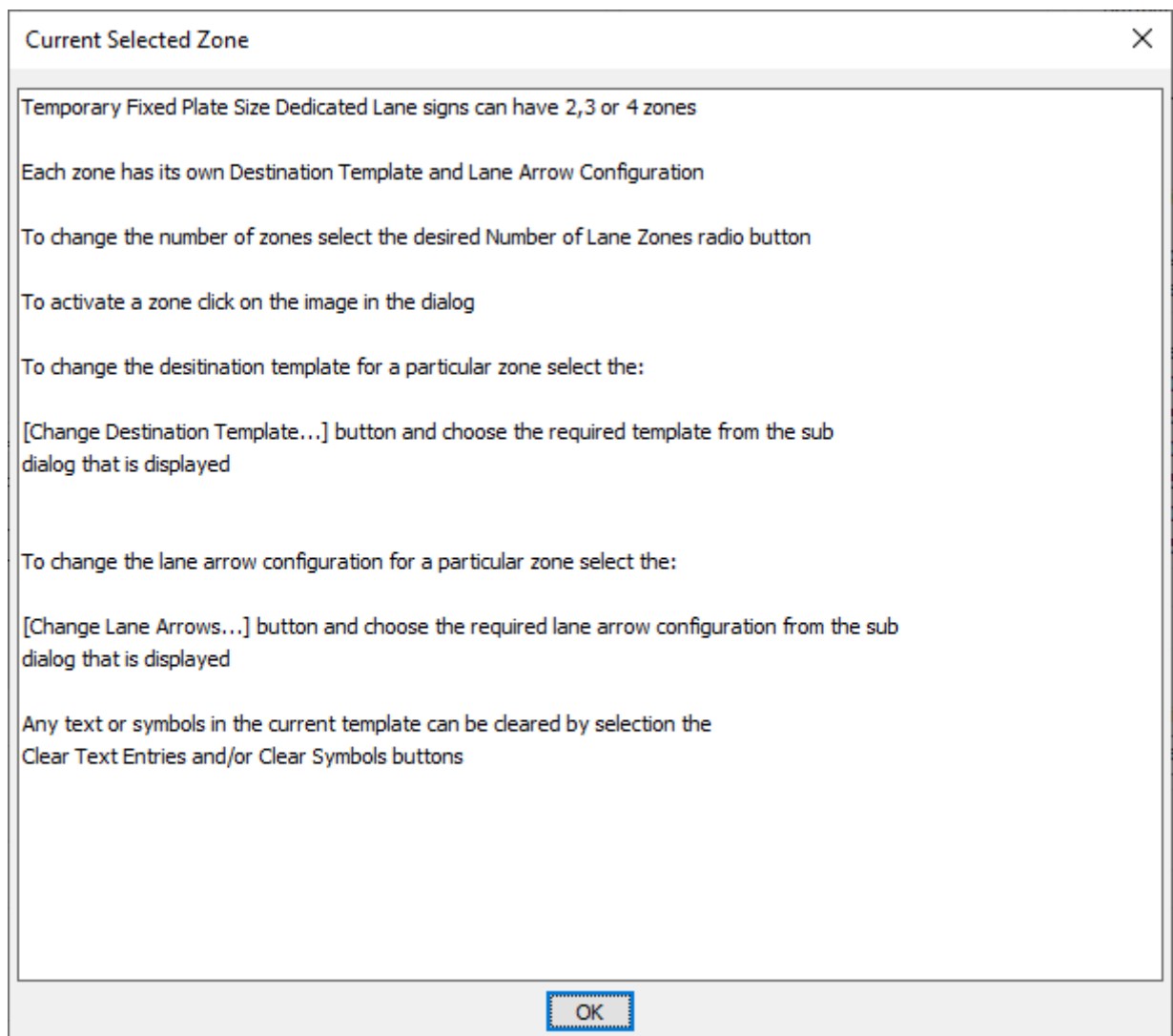
The lane arrows within the current zone can be changes to show a number of lanes and the direction in which the traffic is to bear.



Number of Lane Zones

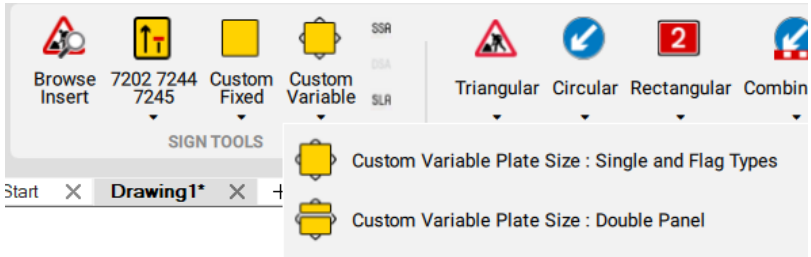
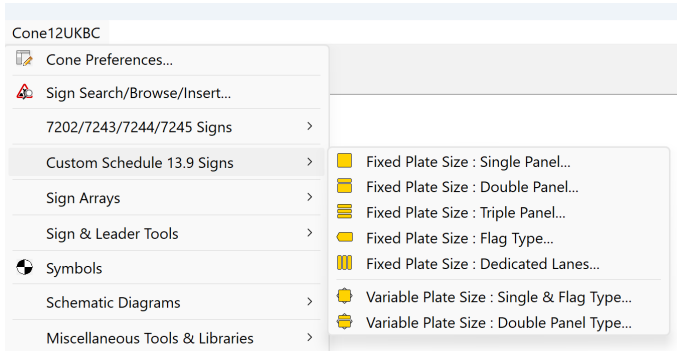
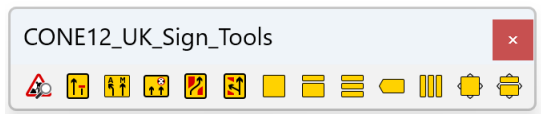
The three radio button options for TWO, THREE or FOUR zones allows you to change the sign layout,

NOTE: there can be multiple lanes within each zone



Target MAX X-Hgt 100	Actual MAX X-Hgt ** 63.53 **	Spare White Space: There is 0 mm spare VERTICAL space at the margins There is 80 mm HORIZONTAL space at the margins	

Custom Schedule 13.9 Signs - Variable Plate Size: Single & Flag Type

Command: CUKVPSINGLE RIBBON: CONE12 Main: SIGN TOOLS	
CONE12UKBC Pull Down Menu	
CONE12_UK_Sign_Tools	

Typical Signs



CONE: Variable Plate Size - Single Stack & Flag Type Sign Wizard

Upper Symbol

NONE

Erase Symbol

Upper Symbol Gap: 2.5

Sign Type

☒ Single

☐ Left Flag

☐ Right Flag

Text Justification

☒ Centre

☐ Left

Background

☒ Yellow

☐ Blue on White

☐ White

☐ Blue

☐ Red

Left Symbol

NONE

Erase Symbol

Legend Text

Advance Warning

This road will be

closed for essential

maintenance works

for 3 days

from Sat June 14

VSpace

2

0

0

1

1

0

0

Scale

100

100

100

100

100

100

100

Right Symbol

NONE

Erase Symbol

Lower Symbol

NONE

Erase Symbol

Lower Symbol Gap: 2.5

Relative size when placed on TM diagram

☒ Normal - 100%

☐ Reduced - 75%

☐ Sub Plates English - 62.5%

☐ Sub Plates Welsh - 50%

Ref / Label: 13.9

Description: Schedule 13-9: Temporary Information

Welsh Accents...

Fractions...

Example Signs...

Clear All Text

Clear All Symbols

User Sign Data Library

Select From User Library...

Save to User Library...

Sign Insert Settings

Insert scale: 1

Ref distance: 0

☒ Include leaders

☒ Group signs & leader

Leader Type & Angle

☐ Dog Leg Leader

☐ Ortho Leader

Click to change

Sign Rotation Method

With Leaders

Default Rotation

☒ Zero ☐ Align ☐ Perp

Without Leaders

☐ Specify on screen

Preset rotation: 0

OK

Cancel

Preview...

The custom variable plate size sign dialog allows an alternate way of designing signs to chapter 8 specifications.

The sign plate size is calculated from the x-height if the text characters and the amount of text and icons added to the sign - the longer the text lines the wider the sign, and the more lines of text the taller the sign.

Sign Type

The sign type can be selected from: the radio buttons:

The image shows a software interface with two sections. The first section, titled 'Sign Type', contains three radio button options: 'Single' (which is selected), 'Left Flag', and 'Right Flag'. The second section, titled 'Text Justification', contains two radio button options: 'Centre' (which is selected) and 'Left'.

Single: Single stack, rectangular sign

Left Flag: arrowhead on sign at left

Right Flag: arrowhead on sign at right

Text Justification

The text justification of the sign can be set from the two radio button options:

Centre: All text centred on sign

Left: Text left aligned on the sign

Sign Background Colour

The background colour of the sign can be selected from the radio buttons, this automatically select the text colour

The image shows a software interface with a section titled 'Background'. It contains five radio button options: 'Yellow' (which is selected), 'Blue on White', 'White', 'Blue', and 'Red'.

Yellow: Yellow plate face with black text

Blue on White: White plate face with blue text

White: White plate face with black text

Blue: Blue plate face with white text

Red: Red plate face with white text

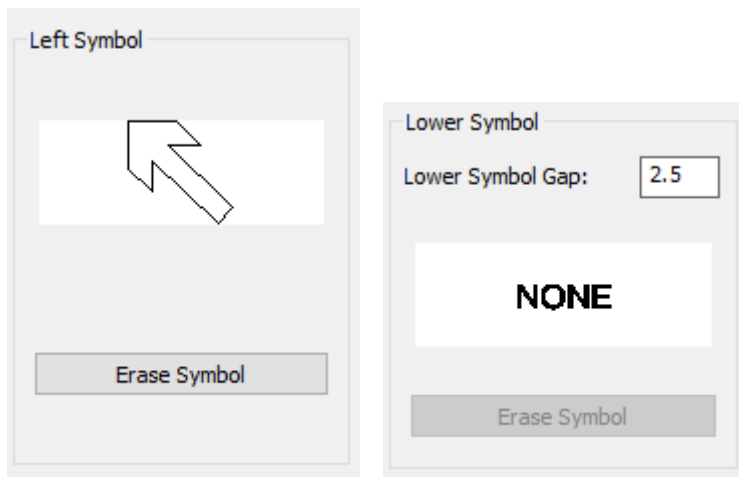
Unlike the fixed plate sign tool. there are no stack templates to select, you can enter up to eight lines of text with symbols to the left, right, above &/or below the block of text with variable gaps between text and the upper and lower symbols.

Legend Text	VSpace	Scale
Advance Warning	2	100
This road will be	0	100
closed for essential	0	100
maintenance works	1	100
for 3 days	1	100
from Sat June 14	0	100
	0	100
		100

After entering the text, the default inter-line spacing can be edited by adding a value in the boxes in the VSPACE column to increase the gap between adjacent lines.

It is also possible to resize the text on individual lines, by entering a value in the boxes in the SCALE column, NOTE: this will scale ALL the text on that one line, not individual words.

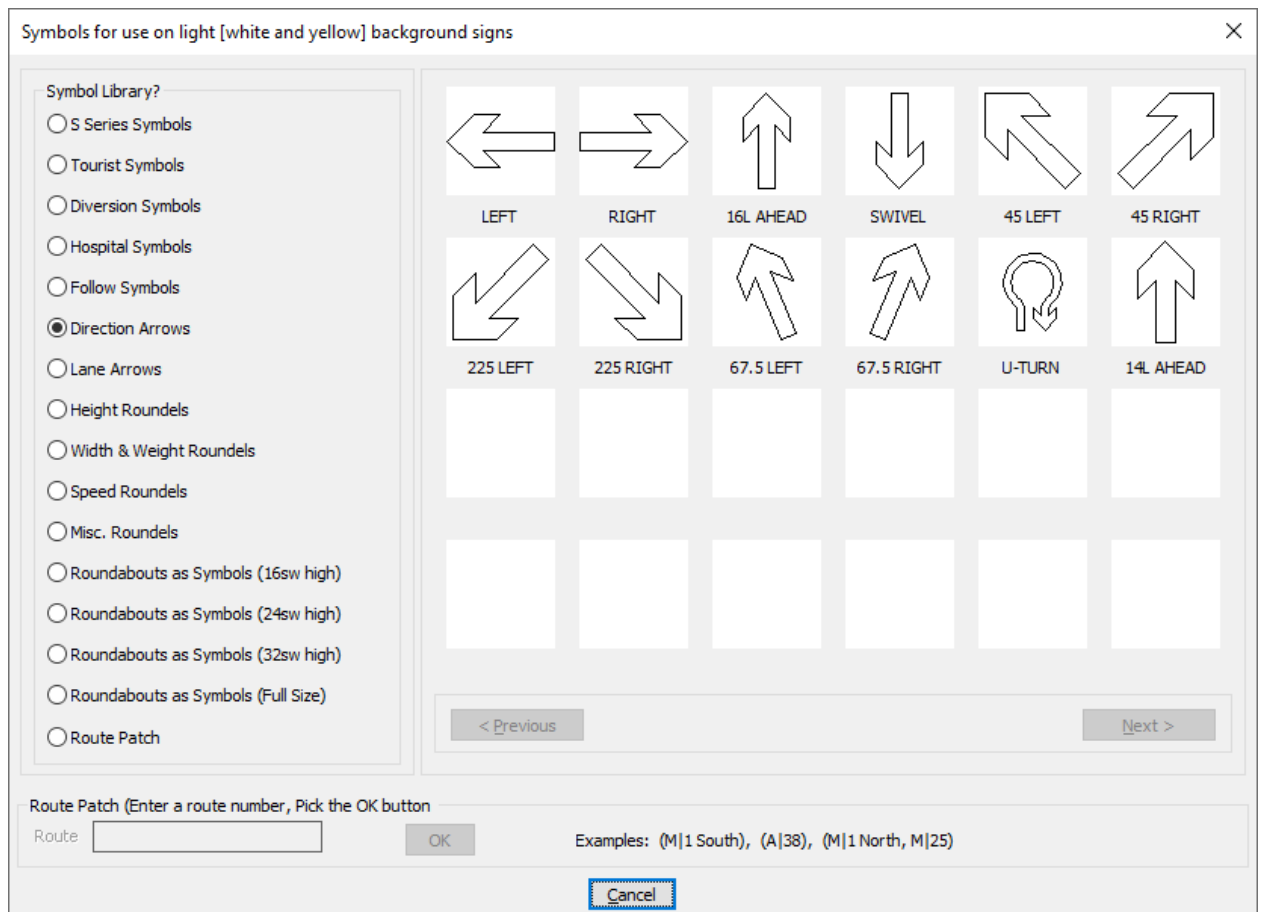
Symbols



There are four positions, where symbols can be added to the drawing.

The upper & lower symbol positions also have boxes to specify the spacing between the text and symbol

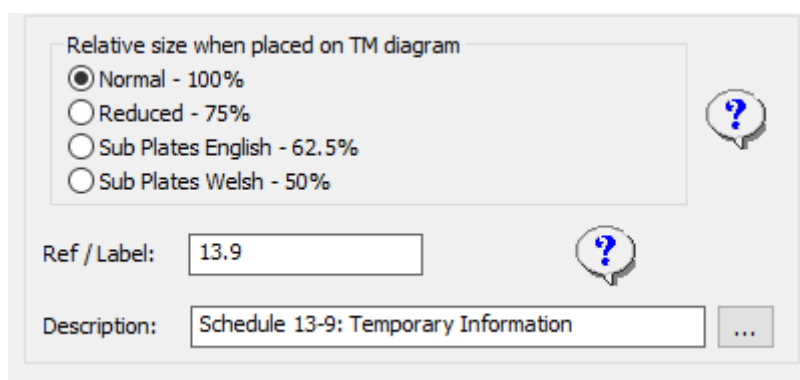
To add, or change the symbol, click on the icon displayed and a sub-dialog will appear showing your options:



Select the symbol you wish to use in that location and it will be shown in the main sign design dialog.

If you wish to remove a symbol, simply click the ERASE SYMBOL button.

Relative Sizes

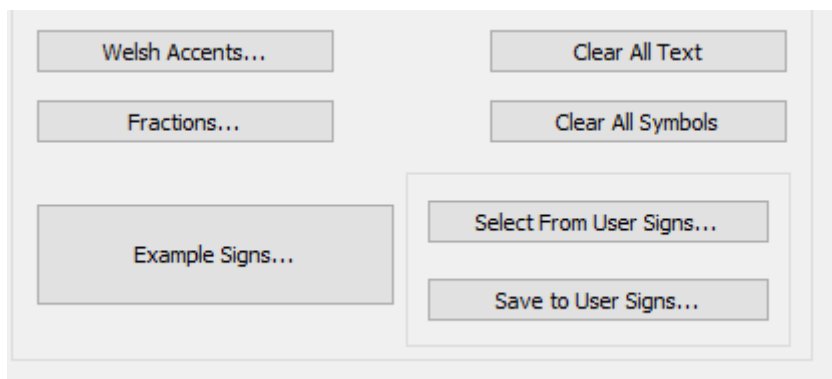


Normal : 100%

Reduced: 75%

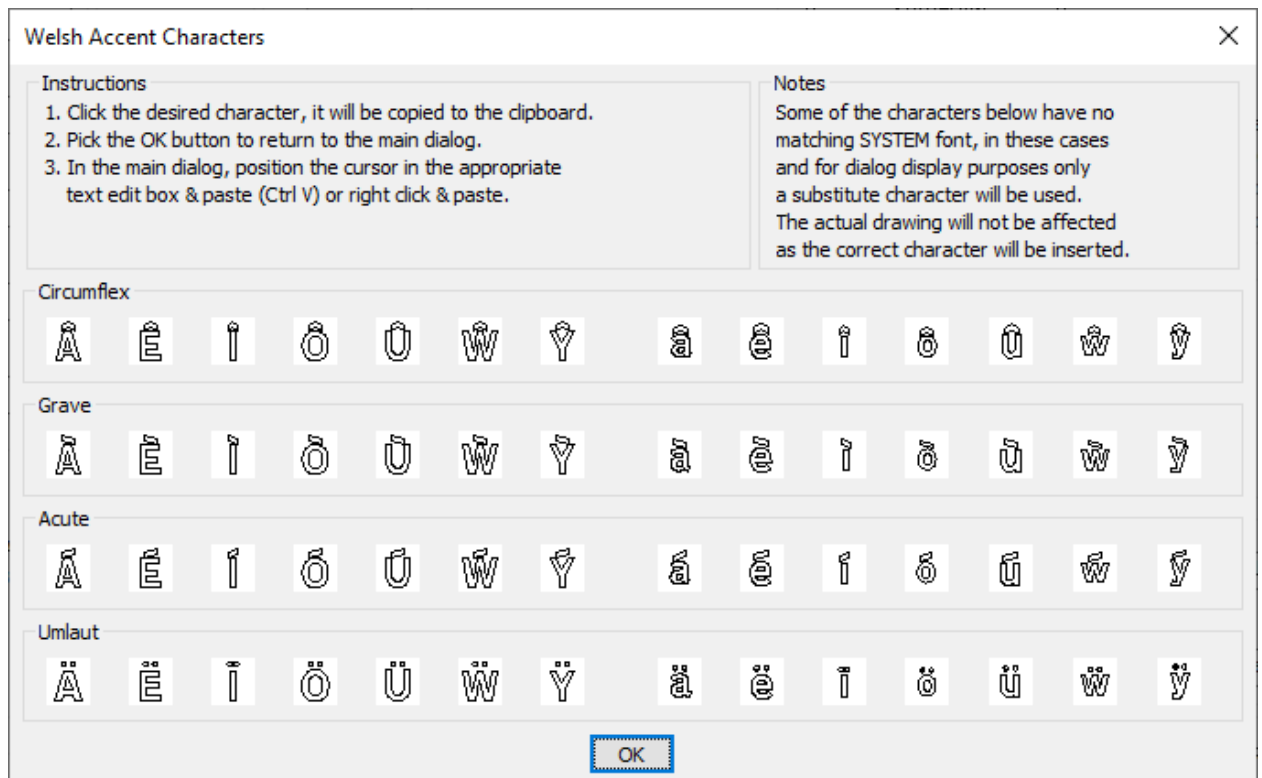
Sub Plates English : 62.5%

Sub Plates Welsh : 50%



Welsh Accents

With limited keyboard options, to type additional characters to display on signs, click the Welsh Accents... button and you will get the following dialog:



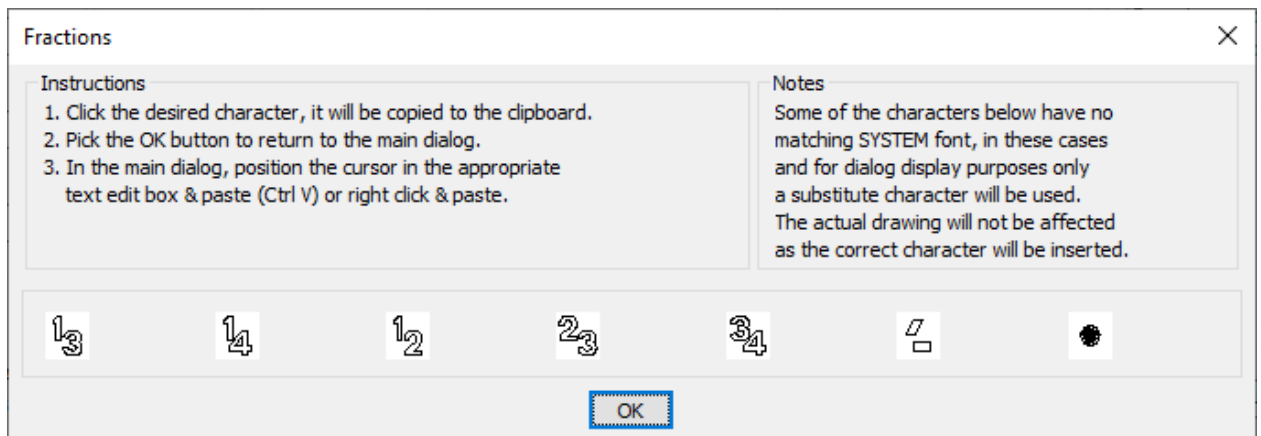
Instructions are displayed in the dialog:

1. Click the desired character, it will be copied to the clipboard
2. Pick the OK button, to return to the sign design dialog
3. in the main dialog, position the cursor in the appropriate text edit box and paste (Ctrl & V) or click the mouse right button and select paste

If the character does not seem to display correctly in the text edit box, this will be a limitation of the system font, if you click the preview button in the main dialog, you will see the actual text font character,.

Fractions

As with welsh characters above, you may want fraction characters that are not on your keyboard to display on signs, click the Fractions... button and you will get the following dialog:



Instructions are displayed in the dialog:

1. Click the desired character, it will be copied to the clipboard
2. Pick the OK button, to return to the sign design dialog
3. in the main dialog, position the cursor in the appropriate text edit box and paste (Ctrl & V) or click the mouse right button and select paste

If the character does not seem to display correctly in the text edit box, this will be a limitation of the system font, if you click the preview button in the main dialog, you will see the actual text font character,.

Clear All Text

The "Clear All Text" button will simply delete all the text the from the current stack being edited, there is no warning that you wish to confirm deletion

Clear All Symbols

The "Clear All Symbols" button will remove all the symbols from the current stack being edited, it will not remove direction arrows that are part of the template.

There is no warning that you wish to confirm deletion

Example Signs

This button shows the same dialog as the change stack template button, but in a display only mode, by clicking on any of the signs, you will not change the current template.

Select from User Signs....

Cone Custom Signs - USER Libraries

User Sign Data Libraries

FP2_ORIGINAL.DAT

Library Housekeeping

Copy Library

Rename Library

Delete Library

Sign Type Filter

☒ Single Panel ☐ Double Panel ☐ Triple Panel ☐ Left Flag ☐ Right Flag ☐ All Types

Select a User Sign from the list

PROJECT	DATE	DESCRIPTION
A-PROJECT-EXAMPLE	09/10/2021-16:54:23	Schedule 13.9 : Temporary Information

List Housekeeping

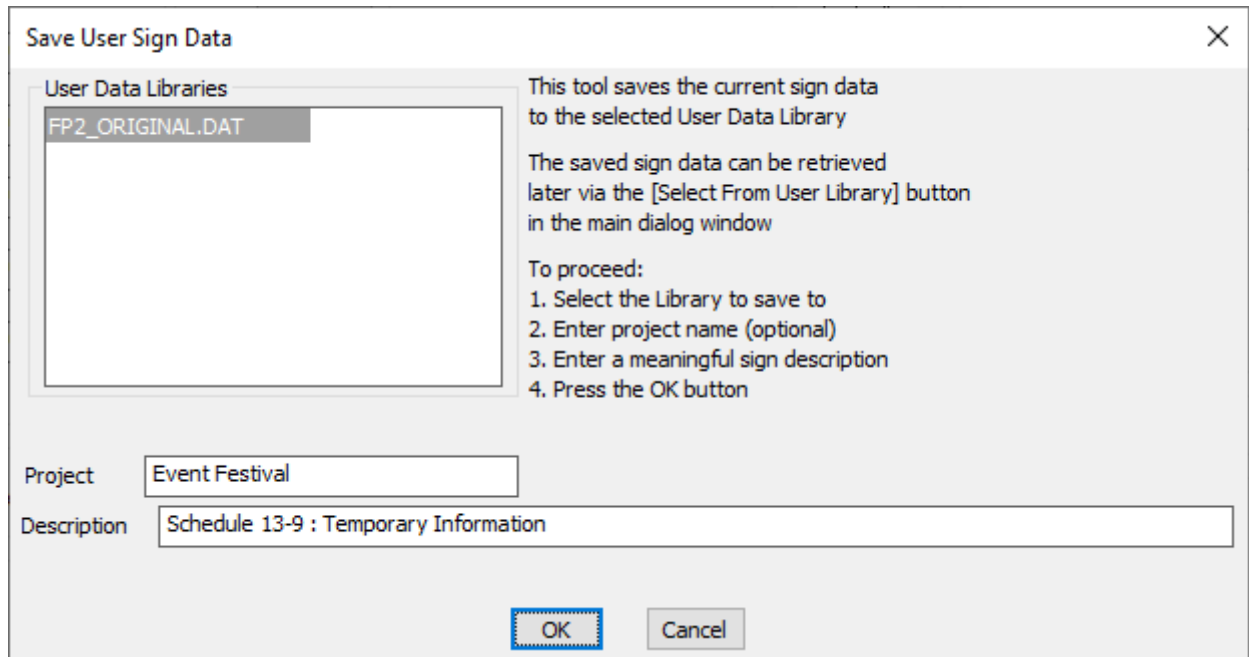
Delete selected line

Rename selected line

OK Cancel

Using this dialog, you can reload signs you have previously saved, then make changes to them to insert onto the current drawing.

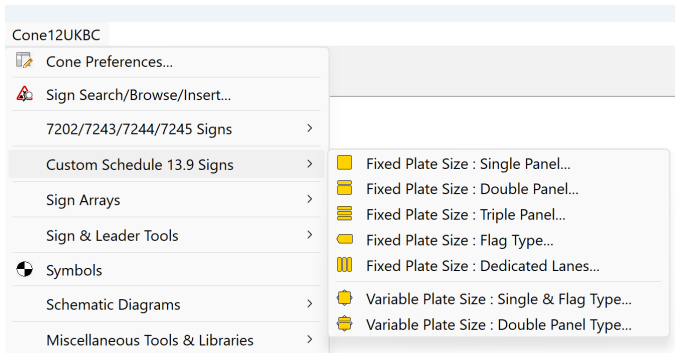
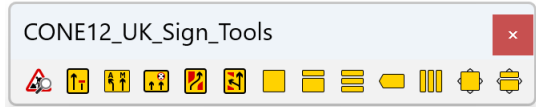
Save to User Signs



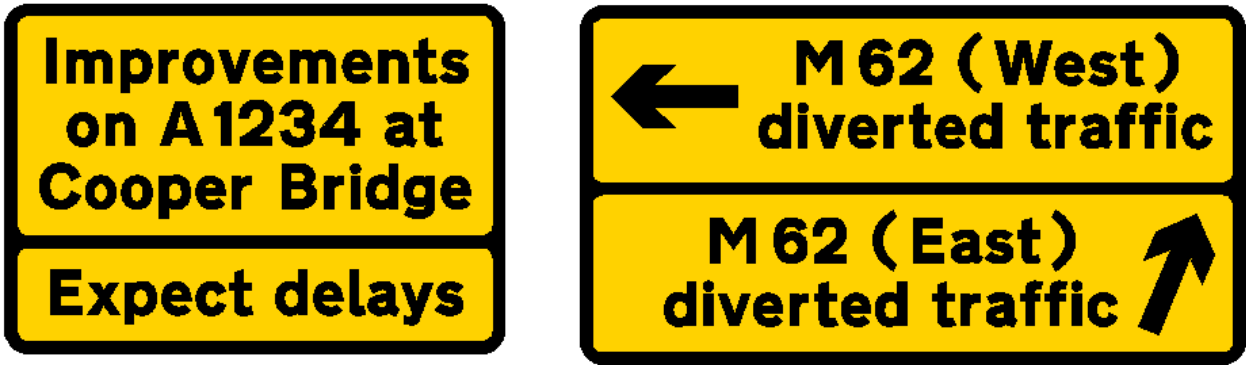
This button allows you to save the current sign being designed to your User library, the instructions are in the dialog:

1. Select the Library to save to from the list on the left of the dialog
2. Enter a project name
3. Enter a (meaningful) sign description
4. Press the OK button

Custom Schedule 13.9 Signs - Variable Plate Size: Double Panel Type

Command: CUKVPDOUBLE RIBBON: CONE12 Main: SIGN TOOLS	
CONE12UKBC Pull Down Menu	
CONE12_UK_Sign_Tools	

Typical Signs



CONE: Variable Plate Size - Double Stack Type Sign Wizard

Stack 1:

- Left Symbol: NONE
- Legend Text:
 - Improvements
 - on A1234 at
 - Cooper Bridge
- VSpace: 0
- Scale: 100
- Right Symbol: NONE
- Lower Symbol: NONE
- Text Justification: ☒ Centre, ☐ Left
- Stack Justification: ☒ Centre, ☐ Left, ☐ Right

Stack 2:

- Left Symbol: NONE
- Legend Text:
 - Expect delays
 -
 -
- VSpace: 0
- Scale: 100
- Right Symbol: NONE
- Lower Symbol: NONE
- Text Justification: ☒ Centre, ☐ Left
- Stack Justification: ☒ Centre, ☐ Left, ☐ Right

General Settings:

- Ref / Label: 13.9
- Description: Schedule 13-9: Temporary Information
- Background: ☒ Yellow, ☐ Blue on White, ☐ White, ☐ Blue, ☐ Red
- Relative size: ☒ Normal - 100%, ☐ Reduced - 75%
- Sign Insert Settings:
 - Insert scale: 1
 - Ref distance: 0
 - ☒ Include leaders
 - ☒ Group signs & leader
- Leader Type & Angle:
 - ☐ Dog Leg Leader
 - ☐ Ortho Leader
- Sign Rotation Method:
 - With Leaders: Default Rotation ☒ Zero, ☐ Align, ☐ Perp
 - Without Leaders: ☐ Specify on screen, Preset rotation: 0

Buttons: OK, Cancel, Preview...

The custom variable plate size double plate sign dialog allows an alternate way of designing signs to chapter 8 specifications.

The sign plate size is calculated from the x-height of the text characters and the amount of text and icons added to the sign - the longer the text lines the wider the sign, and the more lines of text the taller the sign.

Each of the two panels have their text and symbols entered into the boxes in the main dialog

Unlike the fixed plate sign tool, there are no stack templates to select, you can enter up to four lines of text in each stack with symbols to the left, right and/or below.

After entering the text, the default inter-line spacing can be edited by adding a value in the boxes in the VSPACE column to increase the gap between adjacent lines.

It is also possible to resize the text on individual lines, by entering a value in the boxes in the SCALE column, NOTE: this will scale ALL the text on that one line, not individual words.

The screenshot displays a software interface for designing a sign. It features several sections: 'Left Symbol' with a 'NONE' button and an 'Erase Symbol' button; 'Legend Text' with four input fields containing 'Improvements', 'on A|1234 at', 'Cooper Bridge', and an empty field; 'VSpace' with three input fields, each containing '0'; 'Scale' with four dropdown menus, each set to '100'; 'Right Symbol' with a 'NONE' button and an 'Erase Symbol' button; 'Lower Symbol' with a 'NONE' button and an 'Erase Symbol' button; 'Text Justification' with radio buttons for 'Centre' (selected) and 'Left'; and 'Stack Justification' with radio buttons for 'Centre' (selected), 'Left', and 'Right'.

Text Justification

The text justification of the upper and lower stacks of the sign can be set separately from the two radio button options:

Centre: All text centred on sign

Left: Text left aligned on the sign

Stack Justification

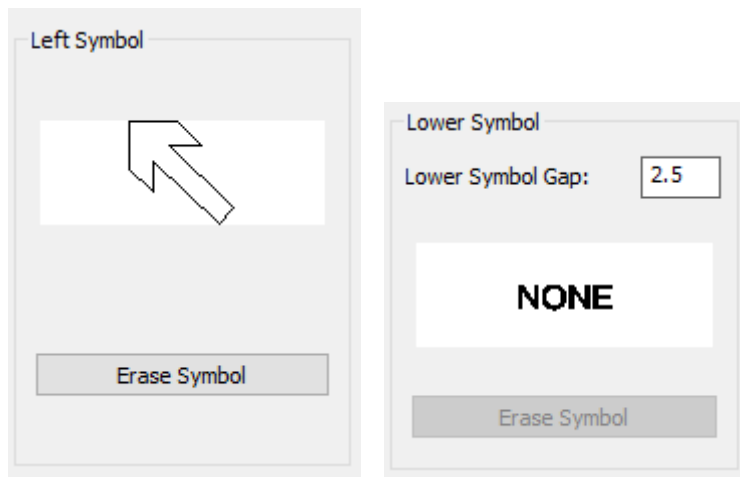
The justification of items in the current panel can be set separately from the three radio button options, this will only have an effect if the elements in this panel are less wide than those in the other panel.

Centre: All items in this panel centred on sign

Left: Items in this panel are left aligned on the sign

Right: Items in this panel are right aligned on the sign

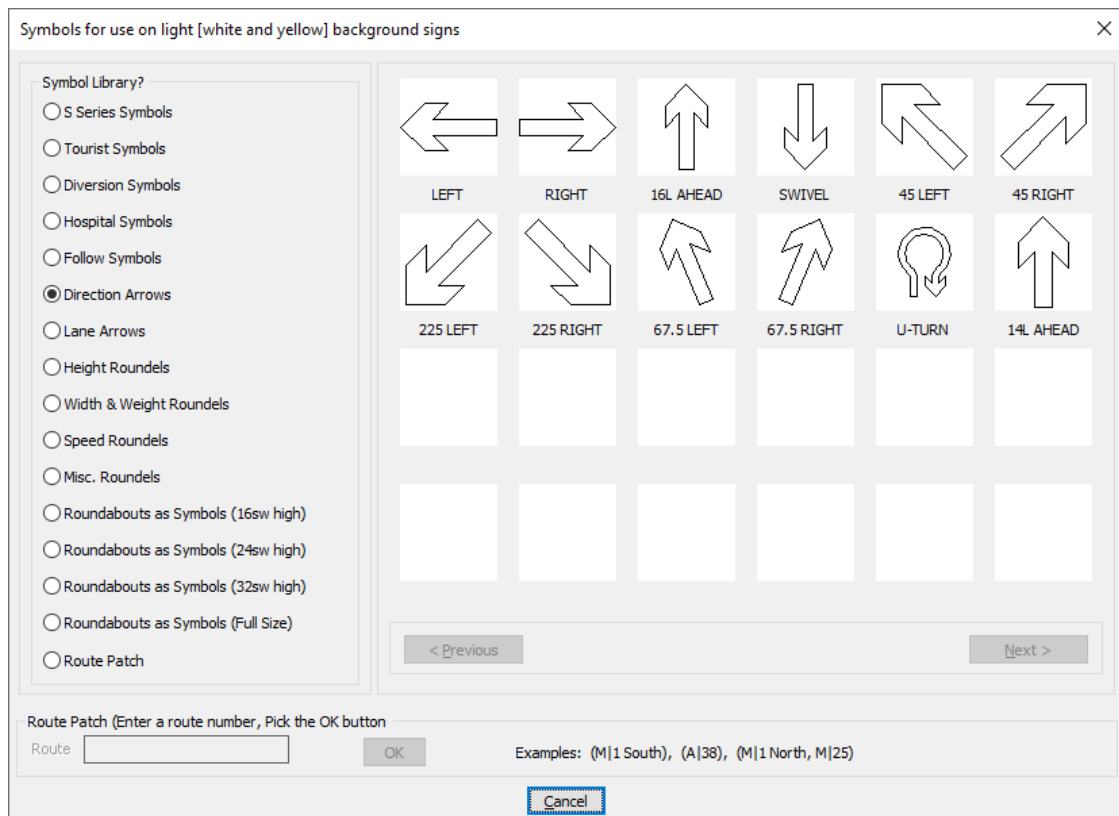
Symbols



There are four positions, where symbols can be added to the drawing.

The upper & lower symbol positions also have boxes to specify the spacing between the text and symbol

To add, or change the symbol, click on the icon displayed and a sub-dialog will appear showing your options:

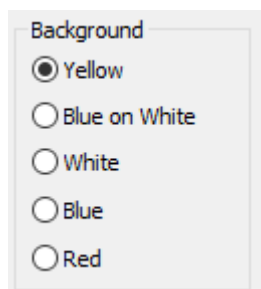


Select the symbol you wish to use in that location and it will be shown in the main sign design dialog.

If you wish to remove a symbol, simply click the ERASE SYMBOL button.

Sign Background Colour

The background colour of the sign can be selected from the radio buttons, this automatically select the text colour



Yellow: Yellow plate face with black text

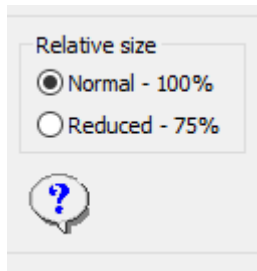
Blue on White: White plate face with blue text

White: White plate face with black text

Blue: Blue plate face with white text

Red: Red plate face with white text

Relative Size

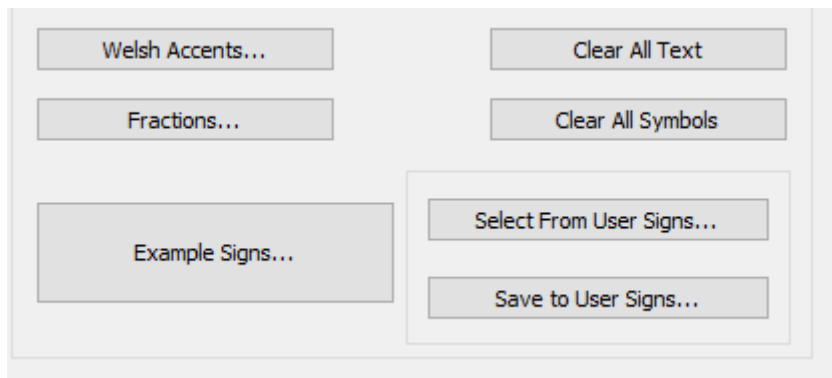


The size of the sign inserted onto the drawing can be set to either:

Normal: 100%

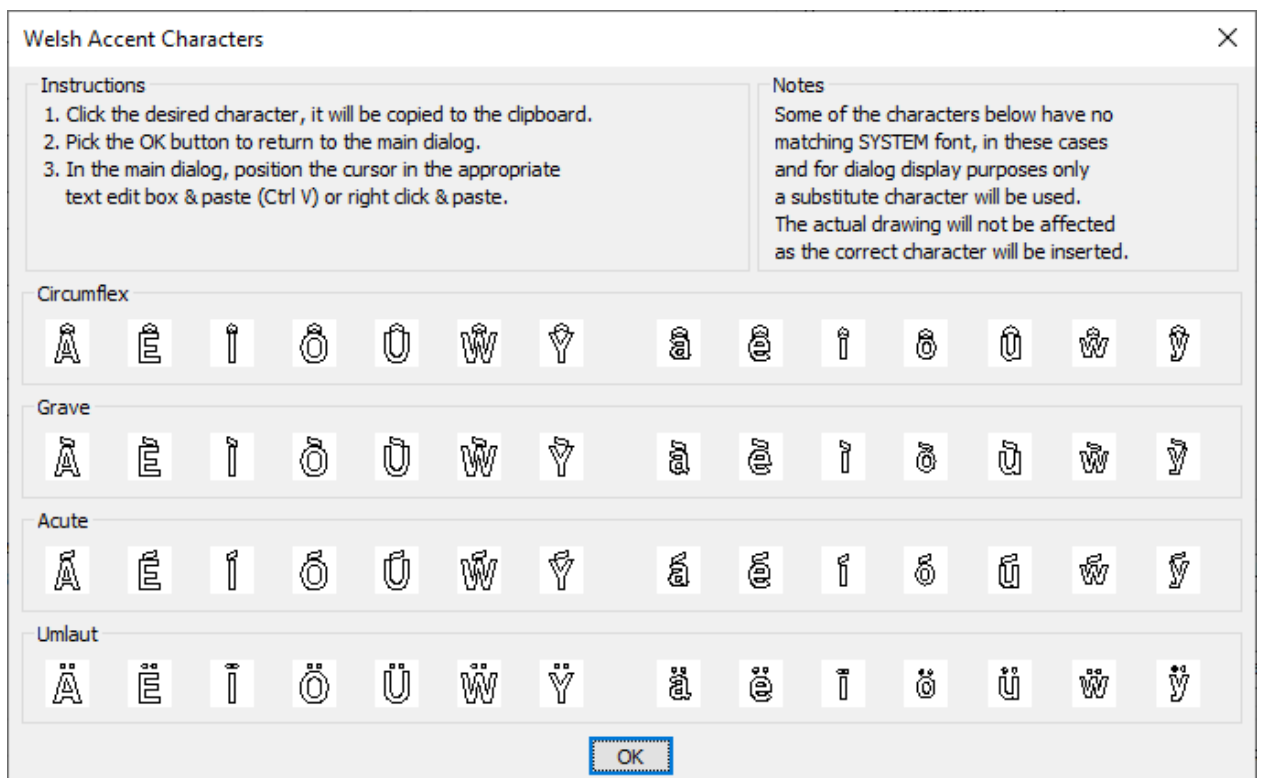
Reduced : 75%

NOTE: This value is independent of any sign scale value used in the insert options.



Welsh Accents

With limited keyboard options, to type additional characters to display on signs, click the Welsh Accents... button and you will get the following dialog:



Instructions are displayed in the dialog:

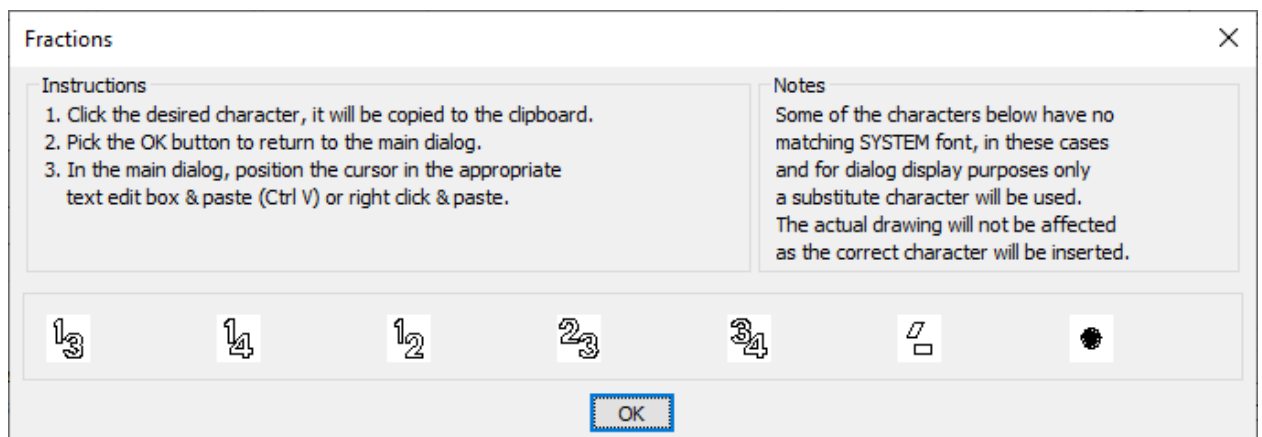
1. Click the desired character, it will be copied to the clipboard
2. Pick the OK button, to return to the sign design dialog

3. in the main dialog, position the cursor in the appropriate text edit box and paste (Ctrl & V) or click the mouse right button and select paste

If the character does not seem to display correctly in the text edit box, this will be a limitation of the system font, if you click the preview button in the main dialog, you will see the actual text font character,.

Fractions

As with welsh characters above, you may want fraction characters that are not on your keyboard to display on signs, click the Fractions... button and you will get the following dialog:



Instructions are displayed in the dialog:

1. Click the desired character, it will be copied to the clipboard
2. Pick the OK button, to return to the sign design dialog
3. in the main dialog, position the cursor in the appropriate text edit box and paste (Ctrl & V) or click the mouse right button and select paste

If the character does not seem to display correctly in the text edit box, this will be a limitation of the system font, if you click the preview button in the main dialog, you will see the actual text font character,.

Clear All Text

The "Clear All Text" button will simply delete all the text the from the current stack being edited, there is no warning that you wish to confirm deletion

Clear All Symbols

The "Clear All Symbols" button will remove all the symbols from the current stack being edited, it will not remove direction arrows that are part of the template.

There is no warning that you wish to confirm deletion

Example Signs

This button shows the same dialog as the change stack template button, but in a display only mode, by clicking on any of the signs, you will not change the current template.

Select from User Signs....

Cone Custom Signs - USER Libraries

User Sign Data Libraries

FP2_ORIGINAL.DAT

Library Housekeeping

Copy Library

Rename Library

Delete Library

Sign Type Filter

☒ Single Panel

☐ Double Panel

☐ Triple Panel

☐ Left Flag

☐ Right Flag

☐ All Types

Select a User Sign from the list

PROJECT	DATE	DESCRIPTION
A-PROJECT-EXAMPLE	09/10/2021-16:54:23	Schedule 13.9 : Temporary Information

List Housekeeping

Delete selected line

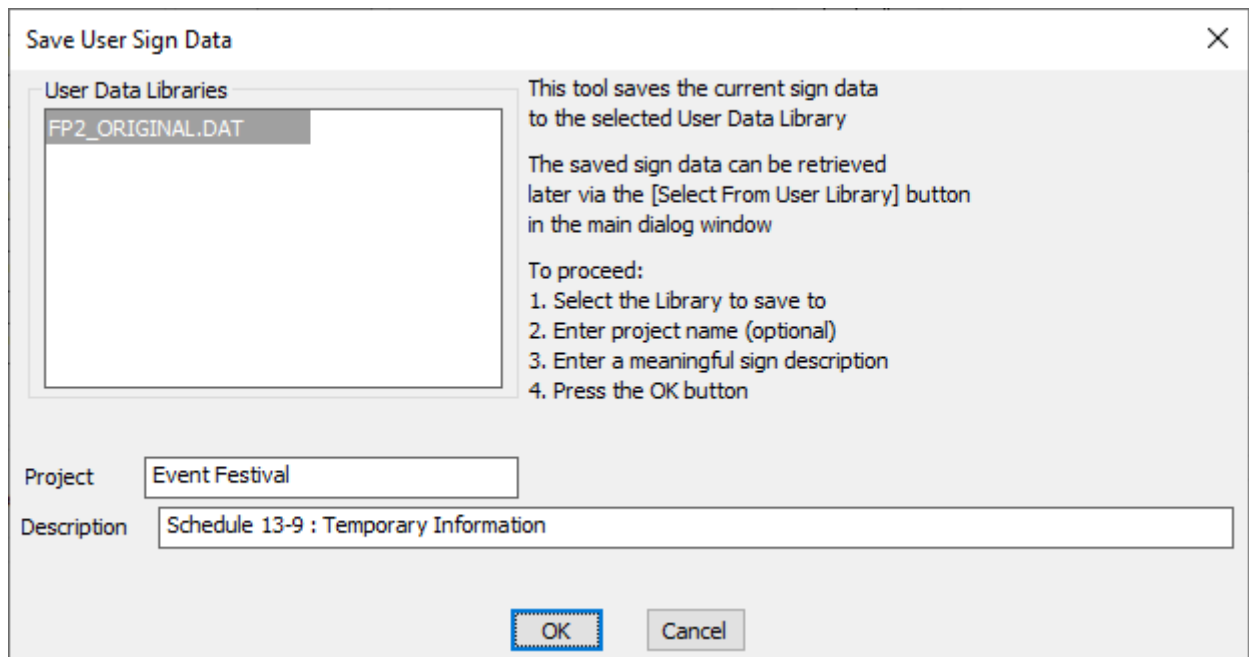
Rename selected line

OK

Cancel

Using this dialog, you can reload signs you have previously saved, then make changes to them to insert onto the current drawing.

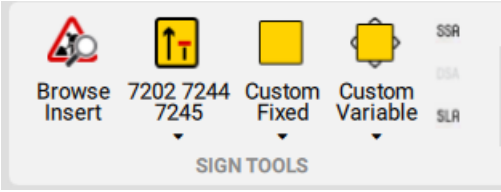
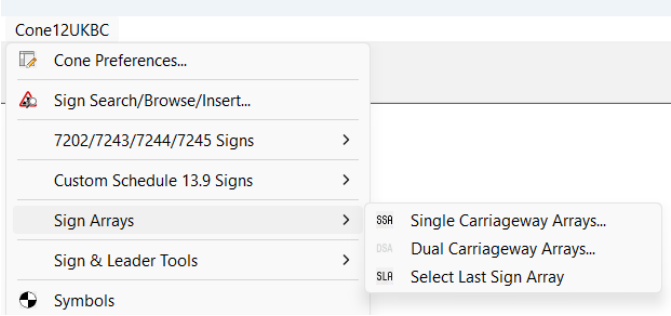
Save to User Signs

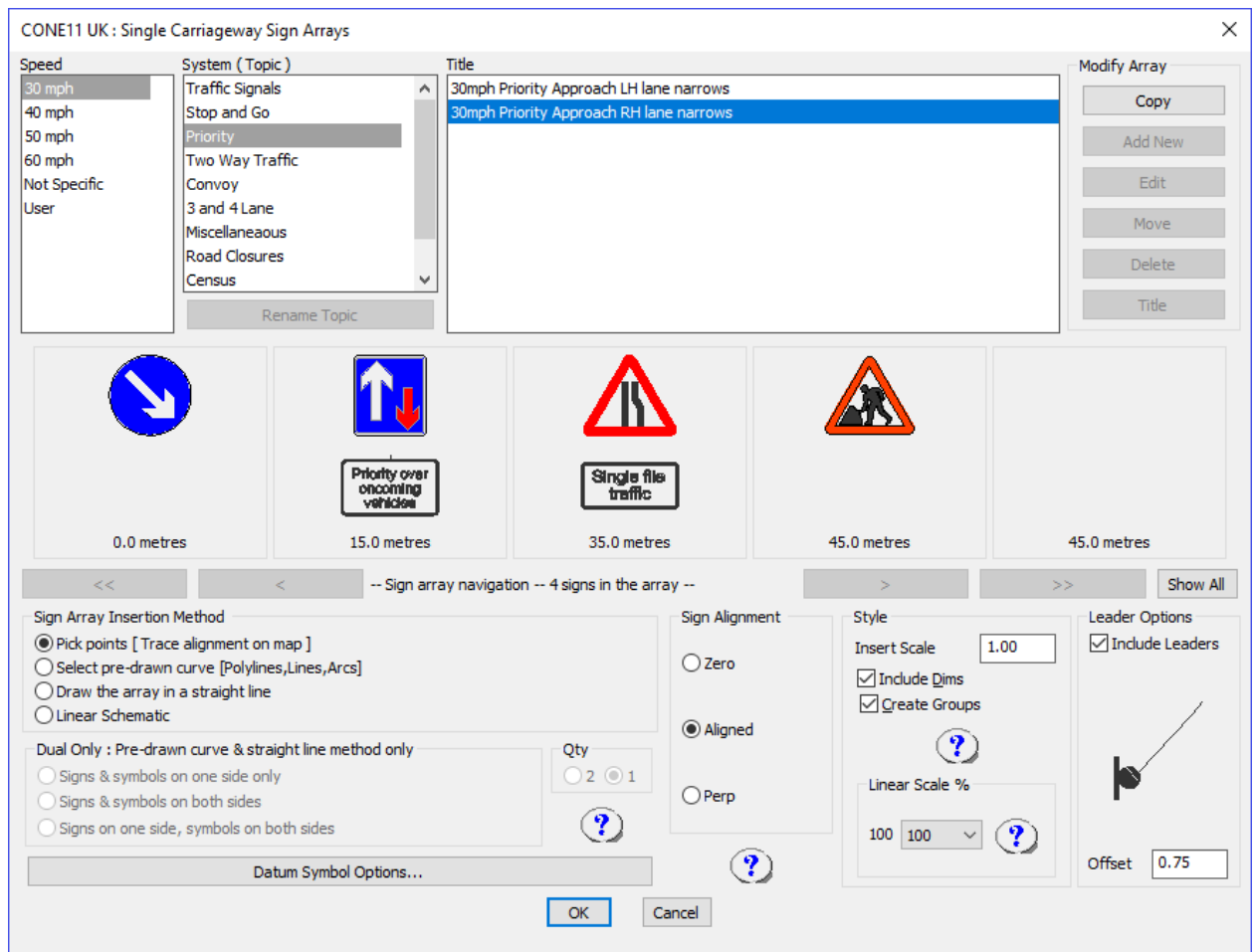


This button allows you to save the current sign being designed to your User library, the instructions are in the dialog:

1. Select the Library to save to from the list on the left of the dialog
2. Enter a project name
3. Enter a (meaningful) sign description
4. Press the OK button

Sign Arrays - Single Carriageway Arrays

Command: CUKSARRAYS RIBBON: CONE12 Main: SIGN TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR CONE12_UK_Sign_General	



Sign Arrays are basically lists of signs and distances from a datum point

Example

Datum Symbol 0.0
 Sign A 15.0
 Sign C 30.0
 Sign D 45.0
 etc.

The most common use for Sign Arrays are in the rapid and accurate placing of an array (group) of signs leading up to the start of a work zone but they can be used anywhere on your schemes.

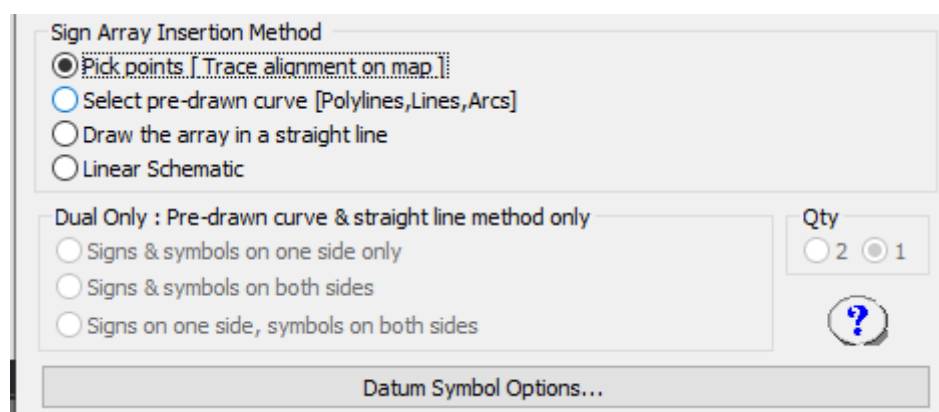
CONE Standard Sign Arrays are provided for both Single & Dual Carriageway schemes and the method of use is the same for both. You cannot change a CONE standard sign arrays but you can copy and modify them or create your own sign array from scratch

Inserting Sign Arrays onto a drawing

Sign Arrays can be inserted into the current drawing in a number of ways:

Method 1 (Pick Points)

Place the Sign Array directly onto your drawing or background map image



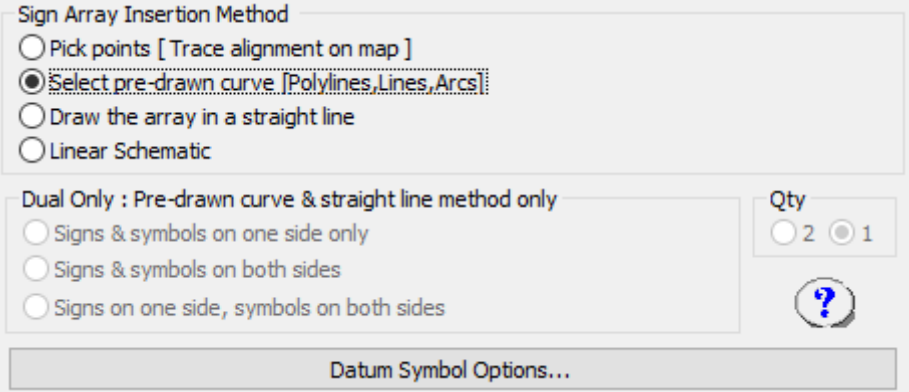
You first pick the start point (Datum) of the array (usually the work zone taper start point)

You then carry on picking more points (as if you were tracing the edge of the carriageway) and as the distances of each sign from the datum point are reached the sign or, sign symbol leader and sign are inserted into the drawing

When all the distances have been reached, the array is ended

There are various options that govern the style of the array

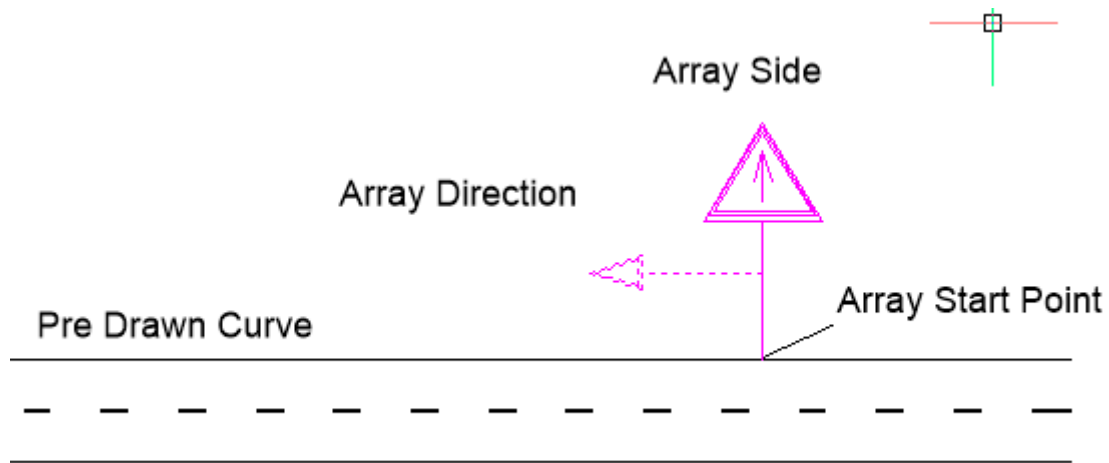
Method 2 Select a pre-drawn curve (Line, Polylines and Arcs)
that you wish your array to follow



The image shows a software dialog box titled "Sign Array Insertion Method". It contains four radio button options: "Pick points [Trace alignment on map]", "Select pre-drawn curve [Polylines, Lines, Arcs]", "Draw the array in a straight line", and "Linear Schematic". The second option is selected. Below these is a section labeled "Dual Only : Pre-drawn curve & straight line method only" with three radio button options: "Signs & symbols on one side only", "Signs & symbols on both sides", and "Signs on one side, symbols on both sides". To the right of this section is a "Qty" field with two radio buttons, "2" and "1", where "1" is selected. Below the "Qty" field is a circular icon with a question mark. At the bottom of the dialog is a button labeled "Datum Symbol Options...".

After selecting the curve you are prompted to pick the start point (Datum) on the curve, and then secondly you are prompted to select the direction and the side to place the signs, by pressing spacebar until the magenta/purple icons shows the required direction, then press ENTER. The array is then fully inserted.

If the curve you selected is not long enough to accommodate all of the distances then you have the option of having the signs that can't fit on the curve inserted at a point tangential to the end of the curve, or you can cancel.



Method 3 Draw the array in a straight line

This method draws the array in straight line at an angle you choose

Sign Array Insertion Method

☐ Pick points [Trace alignment on map]

☐ Select pre-drawn curve [Polylines,Lines,Arcs]

☒ Draw the array in a straight line

☐ Linear Schematic

Dual Only : Pre-drawn curve & straight line method only

☐ Signs & symbols on one side only

☐ Signs & symbols on both sides

☐ Signs on one side, symbols on both sides

Qty ☐ 2 ☒ 1

Datum Symbol Options...

You are prompted to pick the start point (Datum) and then a second point, which determines the angle of the array, then lastly you are prompted to select the side to place the signs. The array is then fully inserted

Method 4. Linear Schematic

This is similar to method 3 except that the distances between the signs regularly spaced (not the actual real world distances)

Sign Array Insertion Method

☐ Pick points [Trace alignment on map]

☐ Select pre-drawn curve [Polylines,Lines,Arcs]

☐ Draw the array in a straight line

☒ Linear Schematic

Dual Only : Pre-drawn curve & straight line method only

☐ Signs & symbols on one side only

☐ Signs & symbols on both sides

☐ Signs on one side, symbols on both sides

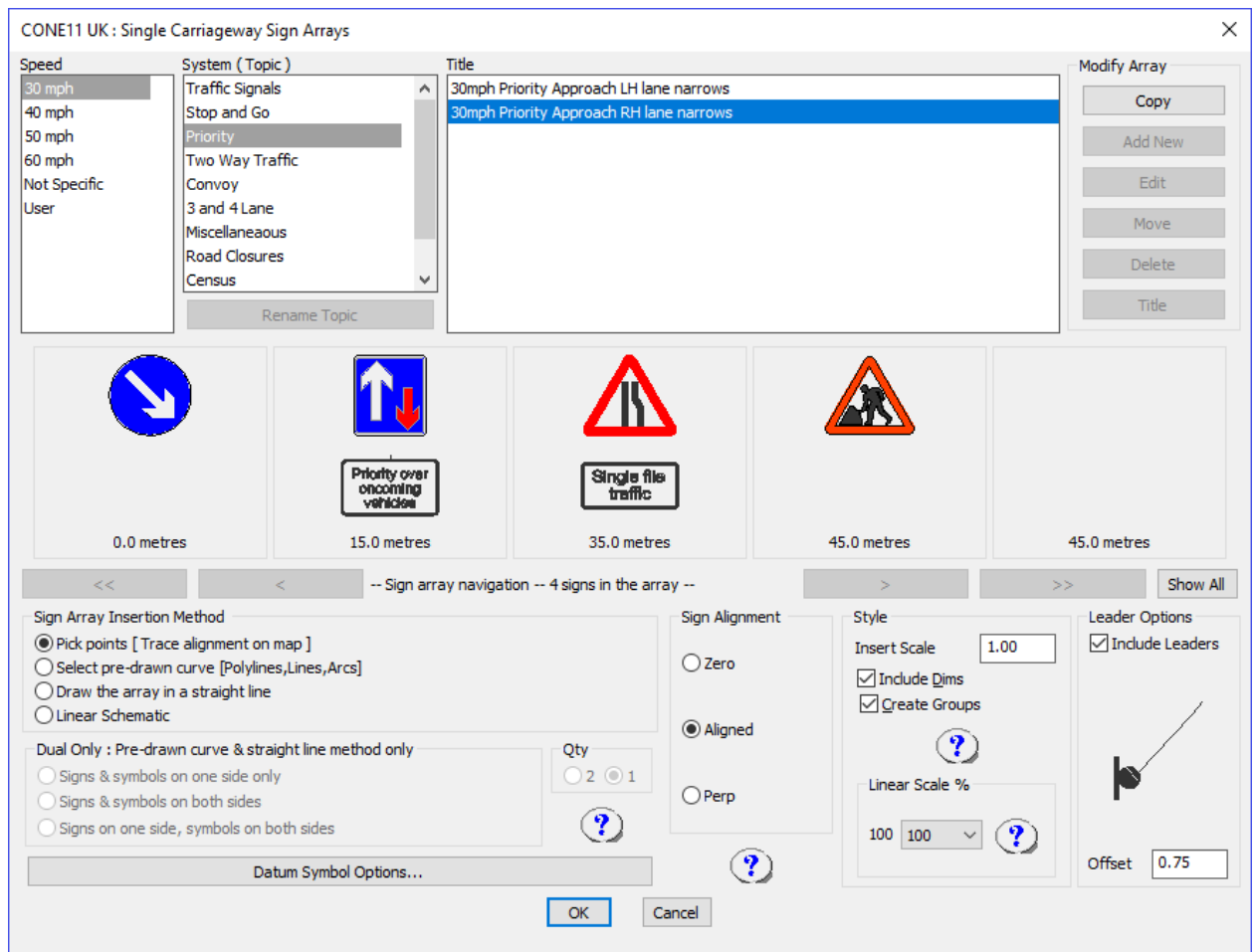
Qty

☐ 2 ☒ 1



Datum Symbol Options...

Sign Array selection is achieved by the use of three list boxes, working from left to right



Speed: Select the permanent speed limit (or Not Specific or User)

Note: User is where the arrays that you created are stored

System (Topic): For Single carriageways arrays the list will be a list of systems (Traffic Signals, Stop and Go etc)

Title: The third box contains a list of sign array titles, you choose from this list to set the current array

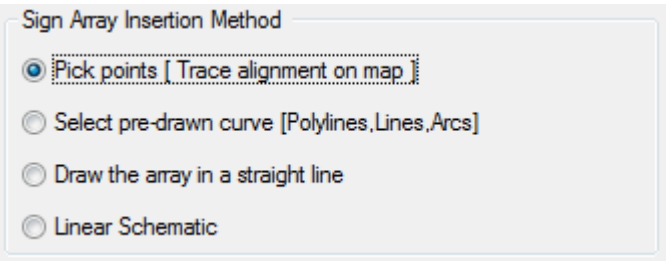
The images of the currently selected array are displayed in a row below complete with the distances from the datum point

If there are more signs than can fit into the main dialog then use the navigation buttons: < << >> > to move through the array, or pick the Show All button

The next row of the dialog working from left to right contains configurable settings and styles.

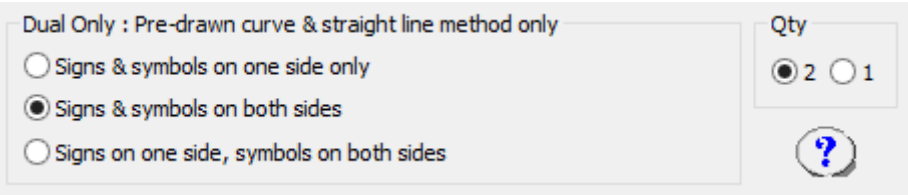
Sign Array Insertion Method

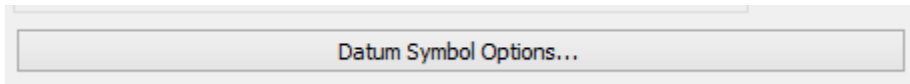
Each of these methods is described in detail on the previous pages



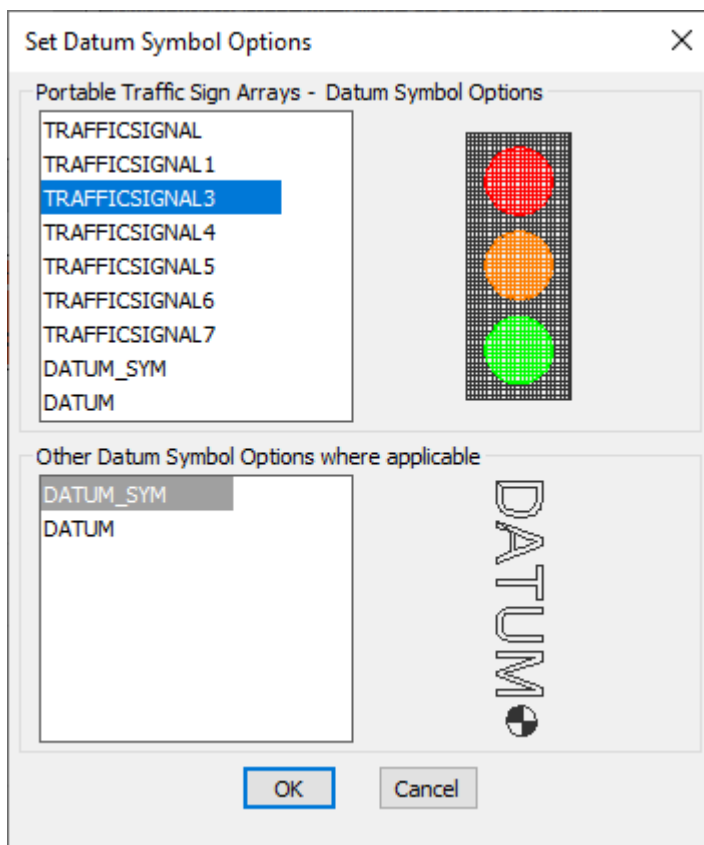
Dual Only

If you are inserting a Carriageway using the Pre Drawn Curve or Straight Line method the a sub option that deals with sign and symbol placement is available, see [Dual Carriageway Sign Arrays](#) for more details





Datum Symbol Options

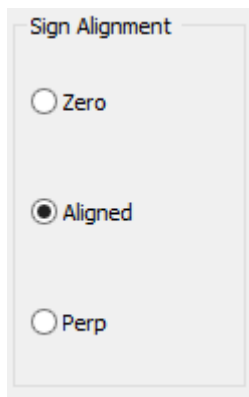


The Datum Symbol Option enables the default datum symbol that is placed at the start of a signs array to be changed

A sub dialog will load which is split into two sections

Symbols for use on Portable Traffic Sign Arrays and Other

Simple select the desired symbol and select the OK button



Sign Alignment

ZERO:

The signs will be placed upright (zero rotation)

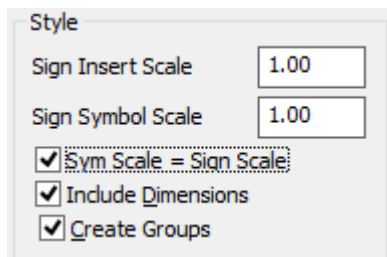
ALIGN:

The signs will be aligned parallel with the direction of the curve

PERP:

The sign will be aligned perpendicular to the direction of the curve

Style



Sign Insert Scale: (This is the same value as Global Insert Scale in PREFERENCES)

This setting defines the scale of the Sign

Assuming you are working with a setting of 1 CAD unit = 1 metre then a Insert Scale setting of 1.0 is perfect when working on schematic schemes

However if you are placing signs onto maps then you may find that an insert scale of 1.0 results in signs that are too large in proportion to the map, in which case an insert setting of 0.5 to 0.75 is recommended.

Sign Symbol Scale:

The scale of the Sign Symbol can be different to the Sign Insert Scale

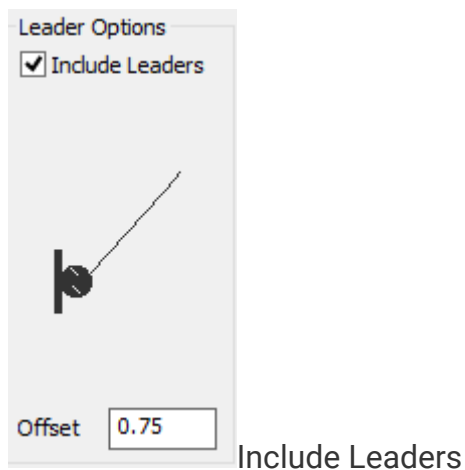
Sym Scale = Sign Scale

If this setting is checked then the Sign scale and the Sign Symbol scale are always the same

Include Dimensions: Check this option to have a dimension (the distance from the datum to the sign symbol insert point) placed on the drawing

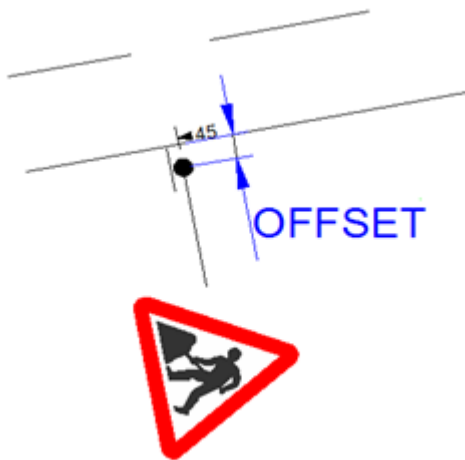
Create Groups: Check this option (recommended) and the sign symbol, leader and sign will be grouped together. Grouping permits the sign symbol, leader and sign to be moved or copied as a group

Note: The CONE Tool: Dog Leg or Stretch a Leader will only work on Grouped objects



If the Include Leaders check box is checked then the sign will be inserted attached to a sign symbol as defined by the current leader setting (Click the leader image to change)

Offset: You can also specify an Offset distance for the symbol, this is the offset distance from the points you pick on the drawing or the curve selected

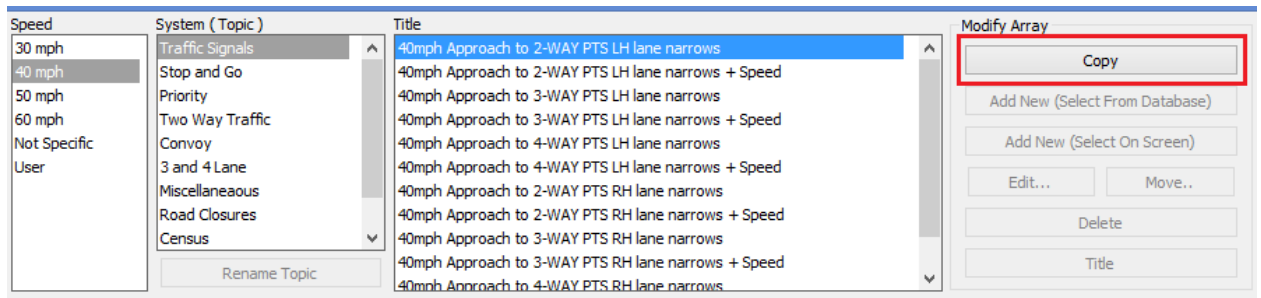


Creating a User Custom Sign Array

There are three methods of creating a Custom User Sign Array

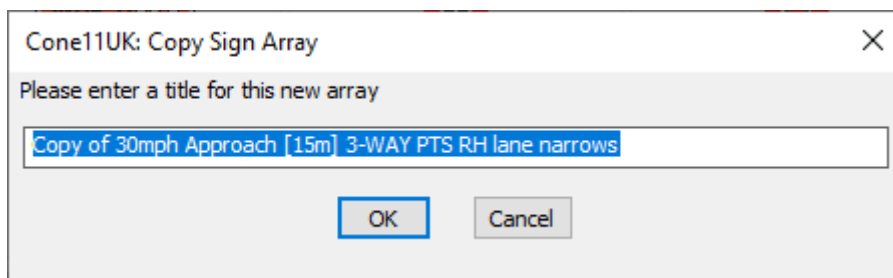
1. Make a copy of a standard array and then modify this new array
2. Create a new array from scratch (Select from Signs Database)

1. Make a copy of a standard array and then modify the new array



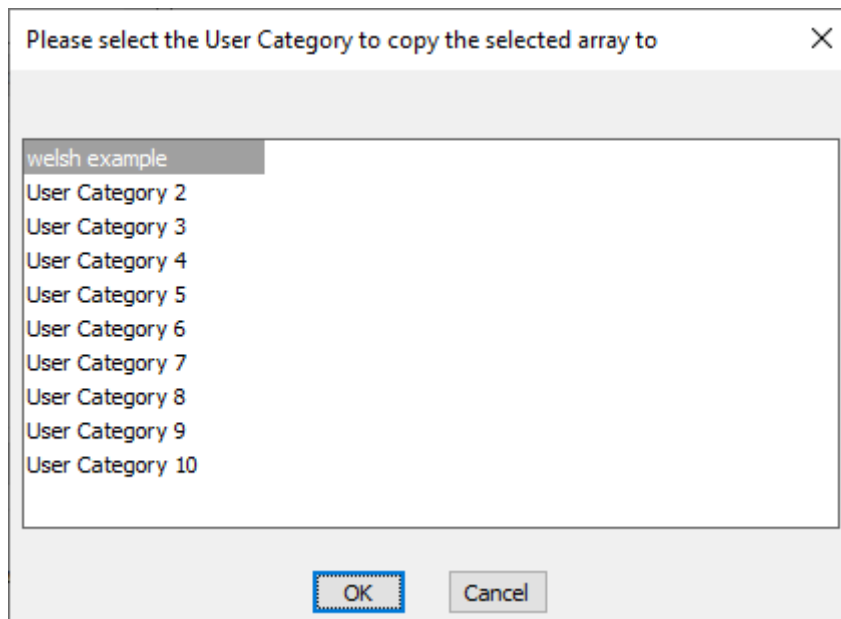
1. Use the Sign Array tool to select the array you wish to copy

2. Pick the Copy button

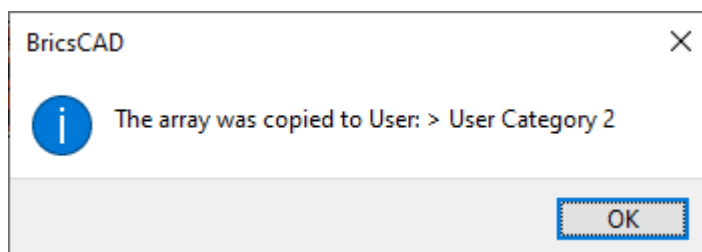


3. Enter a title for this new array and pick the OK button

4. Select the User Category that you wish to copy the selected array to and pick the OK button



The program will respond with (or similar)



5. Select User from the Speed list, then the category you chose from the System (Topic) list and then the title of the array you have just created

The screenshot shows a software interface with three main panels on the left and a 'Modify Array' panel on the right. The 'Speed' panel has a list with 'User' selected. The 'System (Topic)' panel has a list with 'User Category 1' selected. The 'Title' panel has a list with 'Copy of 40mph Approach to 2-WAY PTS LH lane narrows' selected. The 'Modify Array' panel on the right contains several buttons: 'Copy', 'Add New (Select From Database)', 'Add New (Select On Screen)', 'Edit...' (highlighted with a red box), 'Move..', 'Delete', and 'Title'.

All of the Modify Array options will become available

6. Pick the Edit button, the User Edit dialog will be displayed

User - User Category 2 - Custom 30mph Approach to 2-WAY PTS LH lane narrows

Distance	Sign or Symbol	Row
0.0	TRAFFICSIGNAL3 - Portable traffic light symbol	Add
2.0	T7011A - When Red Light Shows Wait Here	Edit
15.0	T517L - Road narrows on one side only ahead - left + T518 - Single file traffic	Delete
35.0	T543 - Traffic signals ahead	Save
45.0	T7001 - Road works ahead	Discard

Upper sign or symbol (Click to activate)



Change

Delete

Lower sign or symbol (Click to activate)



Change

Delete

Settings

Distance from datum

Quantity

☒ Attach to a leader

Select Variable Text if applicable

NOT APPLICABLE

Current Variable >

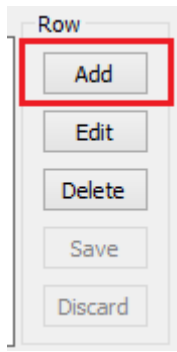
Save

Cancel

Help

The list of signs and symbols in the array are displayed in a selectable list box along with the distance from the datum, each sign or symbol is a selectable Row

The Row options are Add, Edit, Delete, Save and Discard



Add

Add: Adds an additional sign to the array, this involves selecting the additional sign from the CONE Sign Database, specifying a distance from the Datum, optionally changing the Quantity assigned to the Sign and where applicable changing the variable distance that is displayed

When you select the Add button the current image of the sign is cleared

User - User Category 2 - Custom 30mph Approach to 2-WAY PTS LH lane narrows

Distance -----	Sign or Symbol	Row
0.0	TRAFFICSIGNAL3 - Portable traffic light symbol	Add
2.0	T7011A - When Red Light Shows Wait Here	Edit
15.0	T517L - Road narrows on one side only ahead - left + T518 - Single file traffic	Delete
35.0	T543 - Traffic signals ahead	Save
45.0	T7001 - Road works ahead	Discard

Upper sign or symbol (Click to activate)

PICK THE
CHANGE
BUTTON

Change

Delete

Lower sign or symbol (Click to activate)

CLICK ME
TO
ACTIVATE

Change

Delete

Settings

Distance from datum

Quantity

☒ Attach to a leader

Select Variable Text if applicable

NOT APPLICABLE

Current Variable >

Save

Cancel

Help

Settings

Distance from datum

Quantity

☒ Attach to a leader

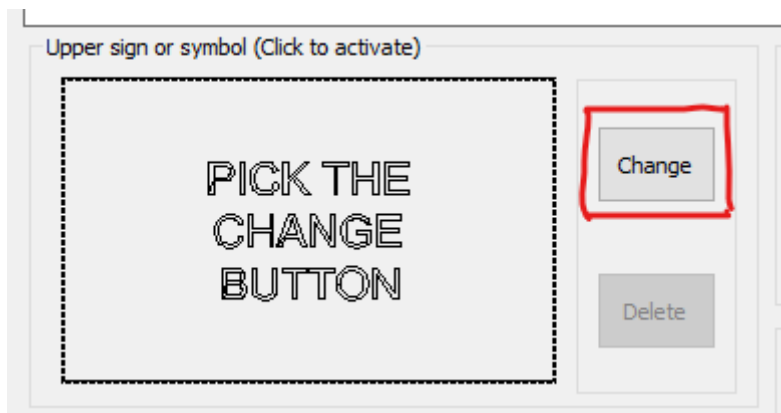
As you have elected to add an additional sign (row) you need to specify the Distance from Datum

for the additional sign

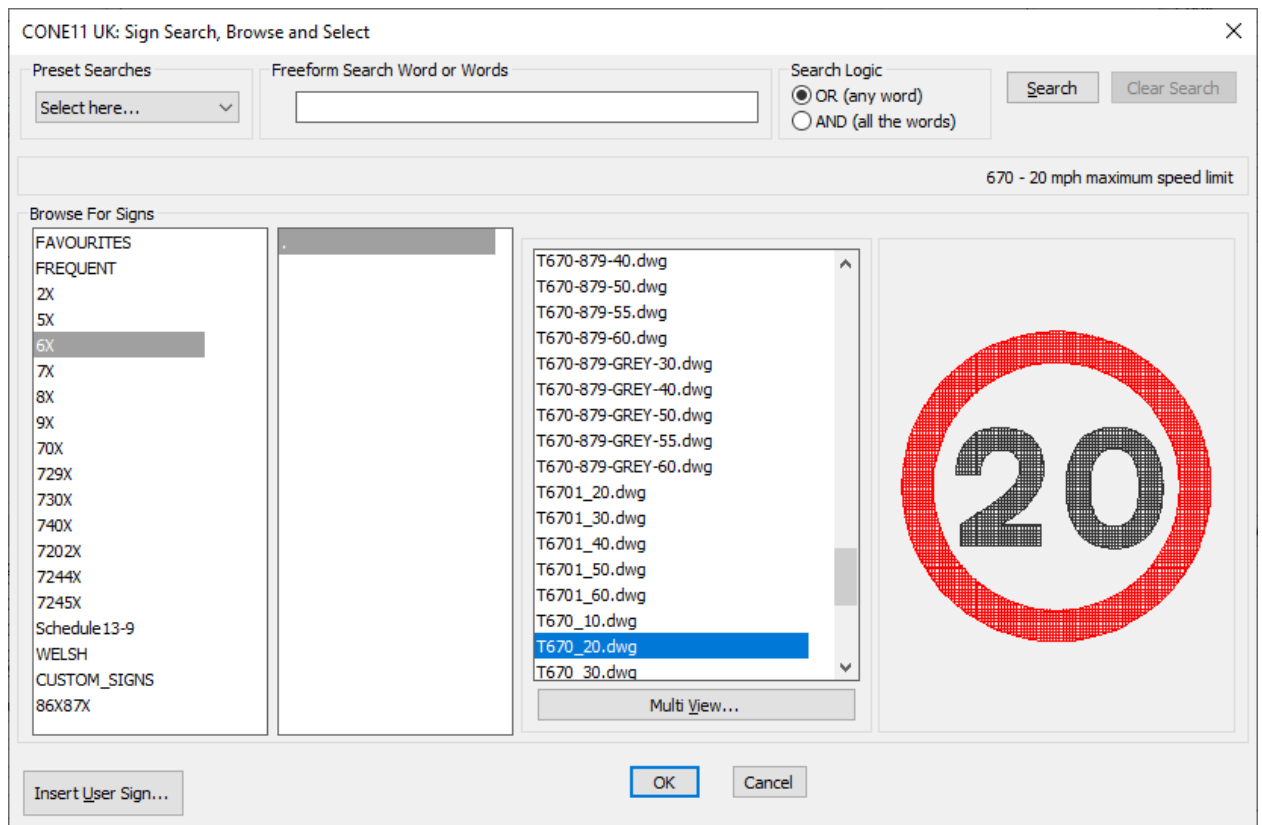
Quantity : This value is normally 1, but for Dual Carriageways the value might be set to 2

Attach to a leader : Whether the sign is attached to a leader or not

Next pick the Change button and select a sign from the Sign Select Dialog that is presented:

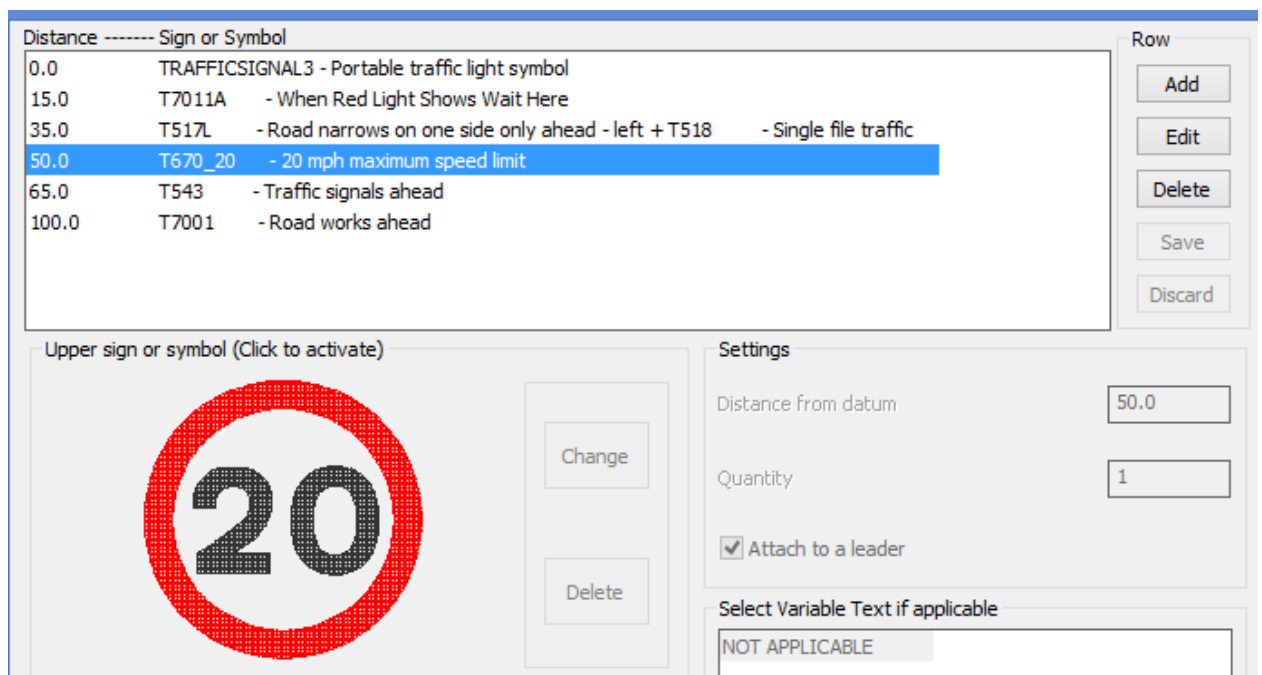
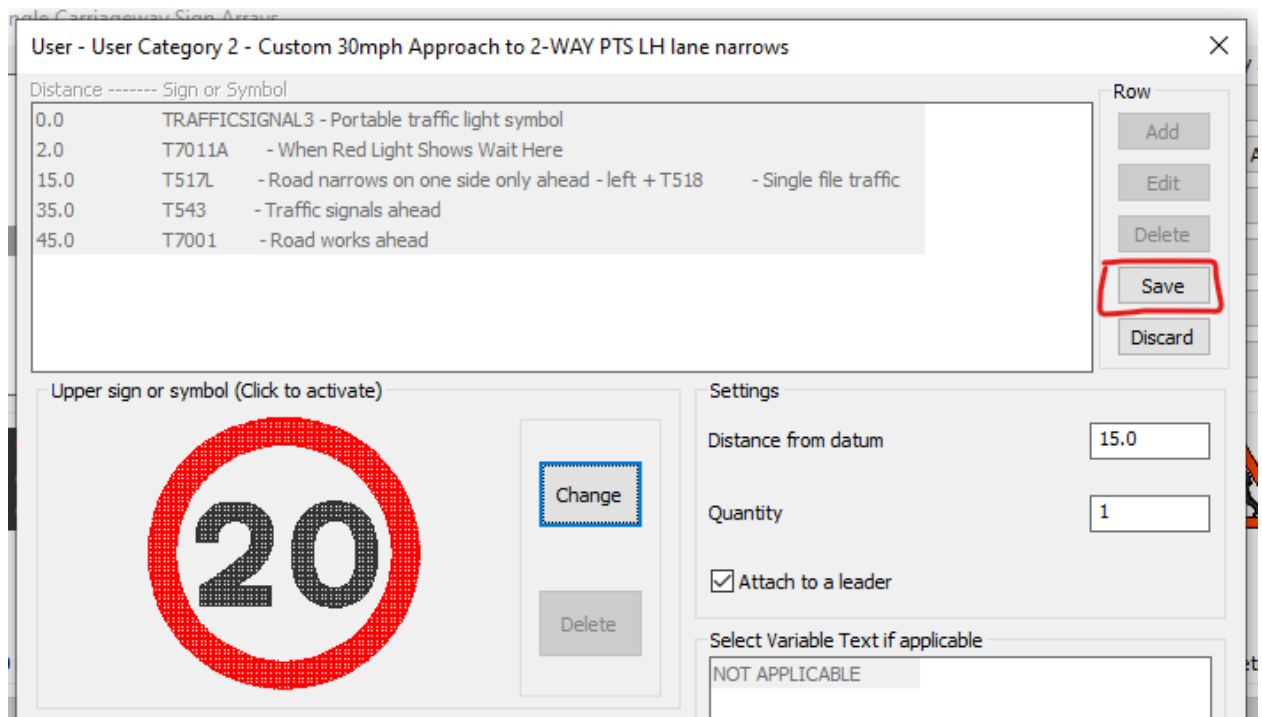


Example



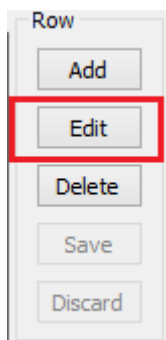
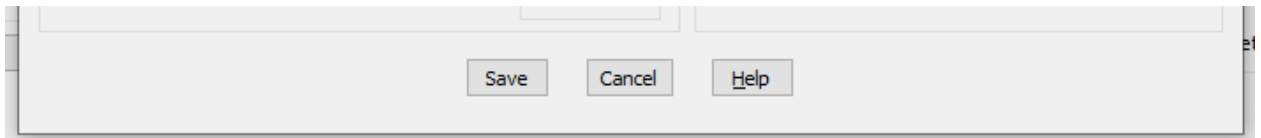
Select the desired sign and pick the OK button, the selected sign will now be displayed thus:

Click the Save button to confirm and have the sign added to the sign array list or click the Discard button to cancel this operation



The distances from the datum for each sign can easily be changed by simply selecting the sign (row) to be changed, enter a revised distance and pick the Rows Save button

When you are happy with your new array pick the Save button at the bottom of the dialog to save and return to the main Sign Array dialog



Edit:

The Row : Edit button enables you to change the current selected sign (row)

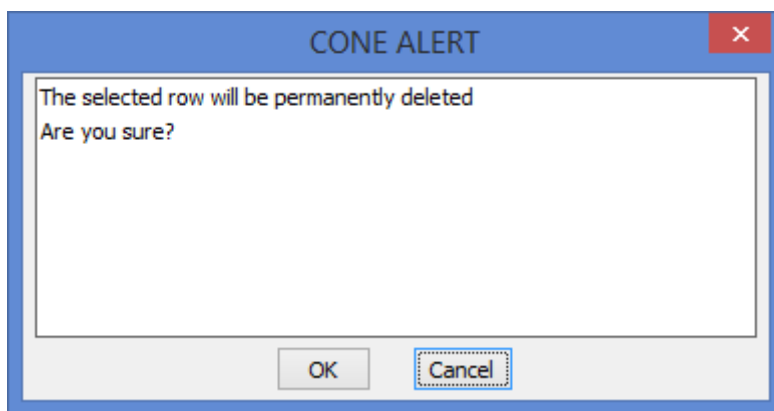
This may involve selecting a different sign or changing the distance from the datum

First select the sign you wish to change from the sign array list and then pick the Edit button

Now either enter a new distance or pick the Change button to select a different sign (the method is the same as previously described as for the Add action)

Click the Save button to confirm or click the Discard button to cancel this operation

Delete



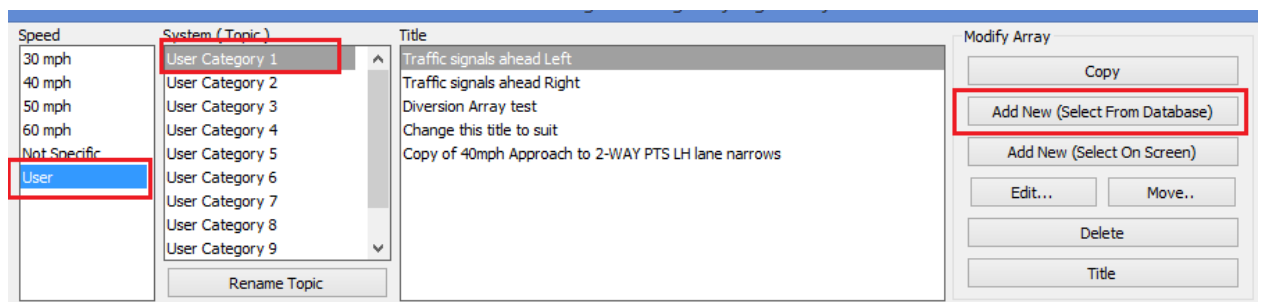
The Row : Delete button removes the selected sign from the array list

Select the sign you want to delete in the main array list box Press the Delete button

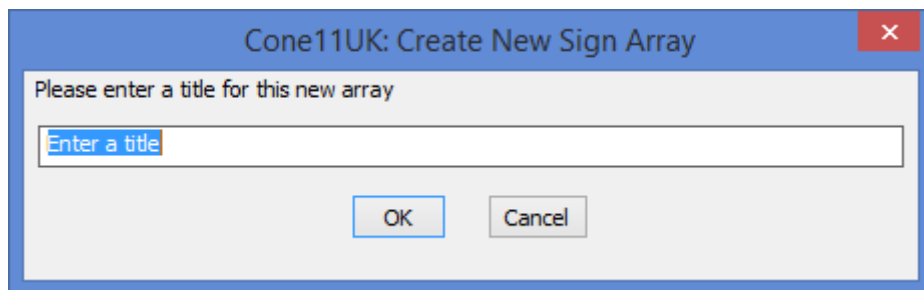
Confirm your action

Creating a User Custom Sign Array

2. Create a new array from scratch (Select from Signs Database)



To create a User Custom Sign Array from scratch first select User from the Speed list box, then select the User Category that you wish to place the new array in from the System (Topic) list then pick the



Add New (Select From Database) button

You will be prompted to enter a title for the new array

Pick the OK button to proceed

The Edit Sign Array dialog will now be displayed, with just one row (The Datum Symbol) included

User - User Category 1 - Enter a title

Distance	Sign or Symbol	Row
0.0	DATUM_SYM - Datum symbol	Add Edit Delete Save Discard

Upper sign or symbol (Click to activate)



Change
Delete

Lower sign or symbol (Click to activate)

Change
Delete

Settings

Distance from datum: 0.0

Quantity: 1

☐ Attach to a leader

Select Variable Text if applicable

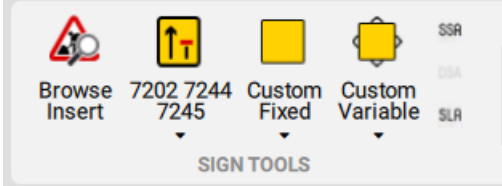
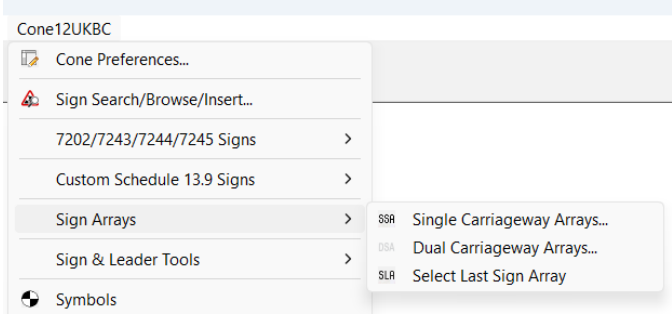
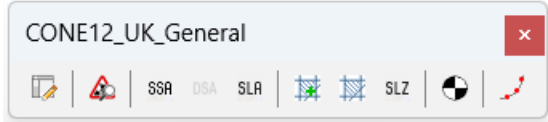
NOT APPLICABLE

Current Variable >

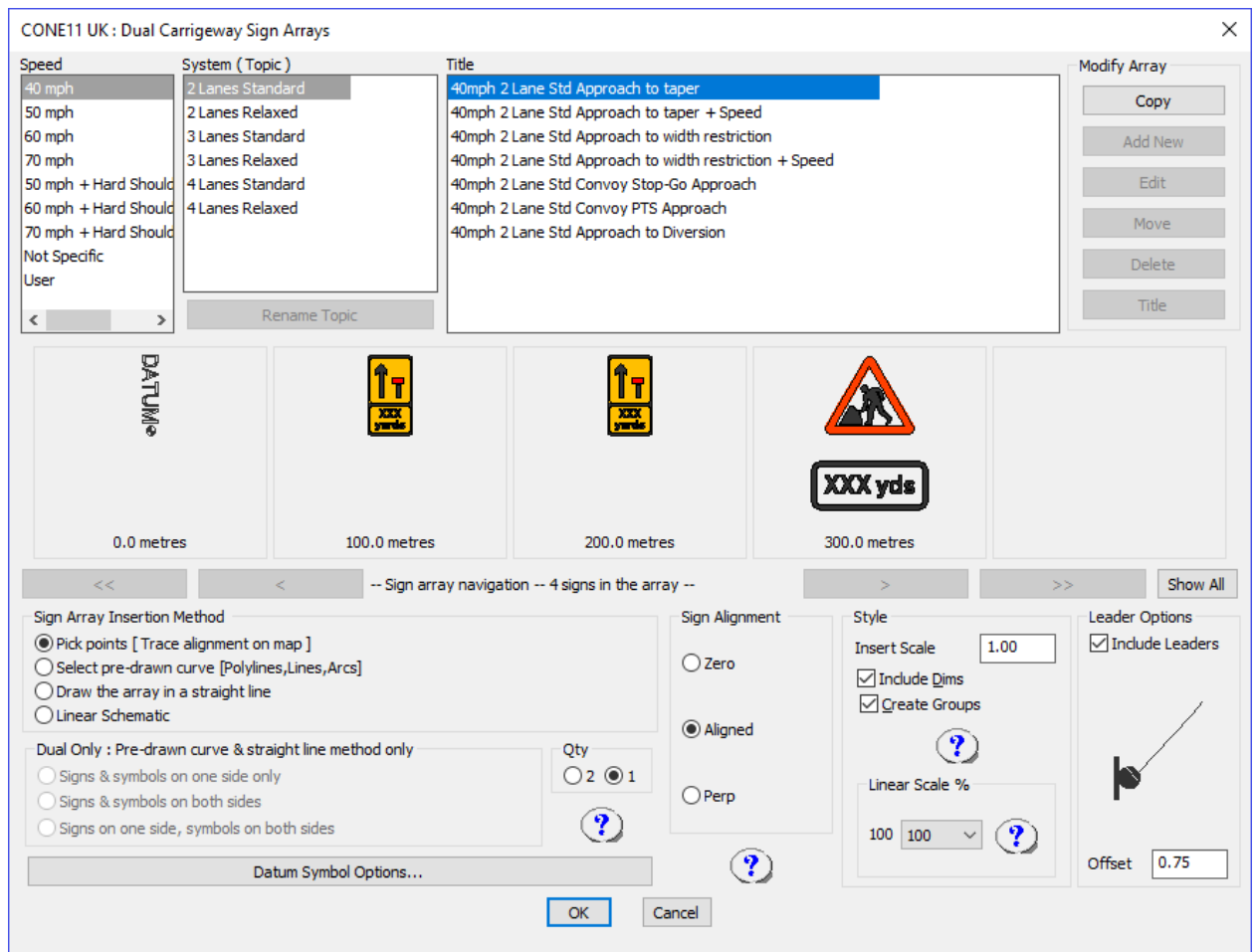
Save Cancel Help

Signs are added and saved to the array in exactly the same manner as the previous section

Sign Arrays - Dual Carriageway Arrays

Command: CUKDARRAYS RIBBON: CONE12 Main: SIGN TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR CONE12_UK_General	

Dialog Box:



Sign Arrays are basically lists of signs and distances from a datum point, Dual carriageway Sign arrays

The features are similar to the single carriageway sign array option, but the road speeds and systems available are different.

Example

Datum Symbol	0.0
Sign A	100.0
Sign C	200.0

Sign D 300.0
etc.

The most common use for Sign Arrays are in the rapid and accurate placing of an array (group) of signs leading up to the start of a work zone but they can be used anywhere on your schemes.

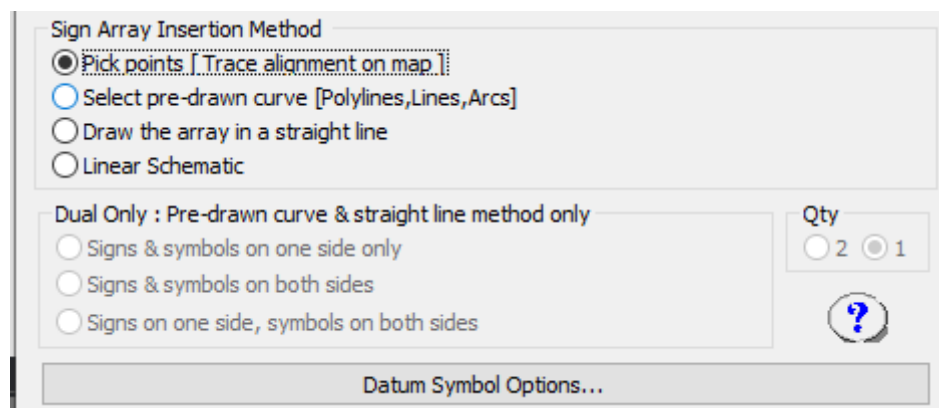
CONE Standard Sign Arrays are provided for both Single & Dual Carriageway schemes and the method of use is the same for both. You cannot change a CONE standard sign arrays but you can copy and modify them or create your own sign array from scratch

Inserting Sign Arrays onto a drawing

Sign Arrays can be inserted into the current drawing in a number of ways:

Method 1 (Pick Points)

Place the Sign Array directly onto your drawing or background map image



You first pick the start point (Datum) of the array (usually the work zone taper start point)

You then carry on picking more points (as if you were tracing the edge of the carriageway) and as the distances of each sign from the datum point are reached the sign or, sign symbol leader and sign are inserted into the drawing

When all the distances have been reached, the array is ended

There are various options that govern the style of the array

Method 2 Select a pre-drawn curve (Line, Polylines and Arcs) that you wish your array to follow

Sign Array Insertion Method

☐ Pick points [Trace alignment on map]

☒ Select pre-drawn curve [Polylines, Lines, Arcs]

☐ Draw the array in a straight line

☐ Linear Schematic

Dual Only : Pre-drawn curve & straight line method only

☐ Signs & symbols on one side only

☐ Signs & symbols on both sides

☐ Signs on one side, symbols on both sides

Qty

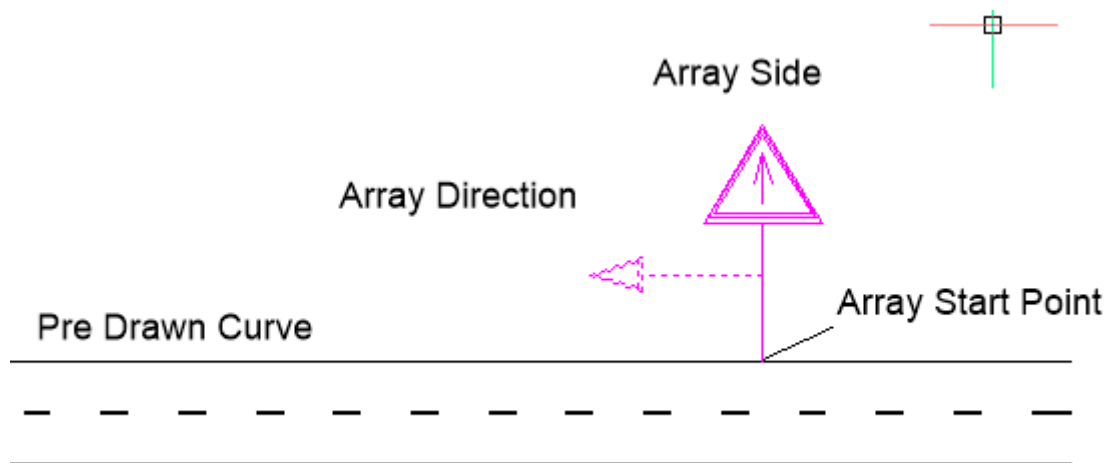
☐ 2 ☒ 1

?

Datum Symbol Options...

After selecting the curve you are prompted to pick the start point (Datum) on the curve, and then secondly you are prompted to select the direction and the side to place the signs, by pressing spacebar until the magenta/purple icons shows the required direction, then press ENTER. The array is then fully inserted.

If the curve you selected is not long enough to accommodate all of the distances then you have the option of having the signs that can't fit on the curve inserted at a point tangential to the end of the curve, or you can cancel.



Method 3 Draw the array in a straight line

This method draws the array in straight line at an angle you choose

Sign Array Insertion Method

☐ Pick points [Trace alignment on map]
☐ Select pre-drawn curve [Polylines,Lines,Arcs]
☒ Draw the array in a straight line
☐ Linear Schematic

Dual Only : Pre-drawn curve & straight line method only

☐ Signs & symbols on one side only
☐ Signs & symbols on both sides
☐ Signs on one side, symbols on both sides

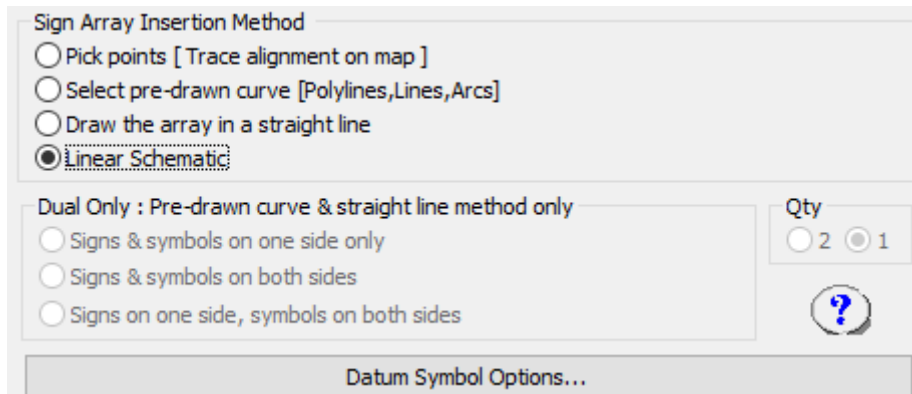
Qty ☐ 2 ☒ 1

Datum Symbol Options...

You are prompted to pick the start point (Datum) and then a second point, which determines the angle of the array, then lastly you are prompted to select the side to place the signs. The array is then fully inserted

Method 4. Linear Schematic

This is similar to method 3 except that the distances between the signs regularly spaced (not the actual real world distances)



The screenshot shows a dialog box titled "Sign Array Insertion Method". It contains four radio button options: "Pick points [Trace alignment on map]", "Select pre-drawn curve [Polylines,Lines,Arcs]", "Draw the array in a straight line", and "Linear Schematic", which is selected. Below these is a section titled "Dual Only : Pre-drawn curve & straight line method only" with three radio button options: "Signs & symbols on one side only", "Signs & symbols on both sides", and "Signs on one side, symbols on both sides". To the right of this section is a "Qty" field with radio buttons for "2" and "1", where "1" is selected. A blue question mark icon is located below the "Qty" field. At the bottom of the dialog is a button labeled "Datum Symbol Options..."

Sign Array selection is achieved by the use of three list boxes, working from left to right

CONE11 UK: Dual Carriageway Sign Arrays

Speed	System (Topic)	Title
40 mph	2 Lanes Standard	40mph 2 Lane Std Approach to taper
50 mph	2 Lanes Relaxed	40mph 2 Lane Std Approach to taper + Speed
60 mph	3 Lanes Standard	40mph 2 Lane Std Approach to width restriction
70 mph	3 Lanes Relaxed	40mph 2 Lane Std Approach to width restriction + Speed
50 mph + Hard Should	4 Lanes Standard	40mph 2 Lane Std Convoy Stop-Go Approach
60 mph + Hard Should	4 Lanes Relaxed	40mph 2 Lane Std Convoy PTS Approach
70 mph + Hard Should		40mph 2 Lane Std Approach to Diversion
Not Specific		
User		

Visual representation of the sign array along a road alignment:

- 0.0 metres: DATUM
- 100.0 metres: XXX yds
- 200.0 metres: XXX yds
- 300.0 metres: XXX yds
- 300.0 metres: XXX yds

Navigation: << < -- Sign array navigation -- 4 signs in the array -- > >> Show All

Sign Array Insertion Method

- ☐ Pick points [Trace alignment on map]
- ☒ Select pre-drawn curve [Polylines,Lines,Arcs]
- ☐ Draw the array in a straight line
- ☐ Linear Schematic

Dual Only : Pre-drawn curve & straight line method only

- ☐ Signs & symbols on one side only
- ☐ Signs & symbols on both sides
- ☒ Signs on one side, symbols on both sides

Qty: ☐ 2 ☒ 1

Sign Alignment

- ☐ Zero
- ☒ Aligned
- ☐ Perp

Style

- Insert Scale: 0.50
- ☒ Include Dims
- ☒ Create Groups
- Linear Scale %: 100 100

Leader Options

- ☒ Include Leaders
- Offset: 0.75

Buttons: OK Cancel

Speed: Select the permanent speed limit (or Not Specific or User)

Note: User is where the arrays that you created are stored

System (Topic): For Dual Carriageways the list will be the Number of Lanes and a Standard

Title: The third box contains a list of sign array titles, you choose from this list to set the current array

The images of the currently selected array are displayed in a row below complete with the distances from the datum point

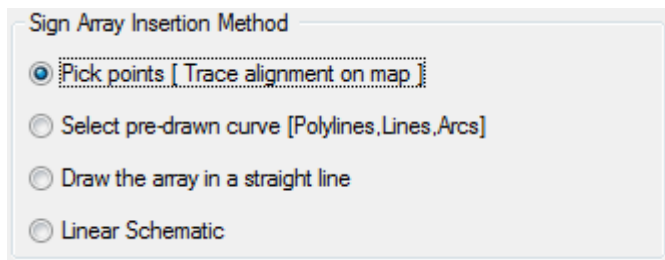
If there are more signs than can fit into the main dialog then use the navigation buttons: < << >> >

to move through the array, or pick the Show All button

The next row of the dialog working from left to right contains configurable settings and styles.

Sign Array Insertion Method

Each of these methods is described in detail on the previous pages



Dual Only

If you are inserting a Dual Carriageway using the Pre Drawn Curve or Straight Line method the a sub option that deals with sign and symbol placement is available, see below for more details

Dual Only : Pre-drawn curve & straight line method only

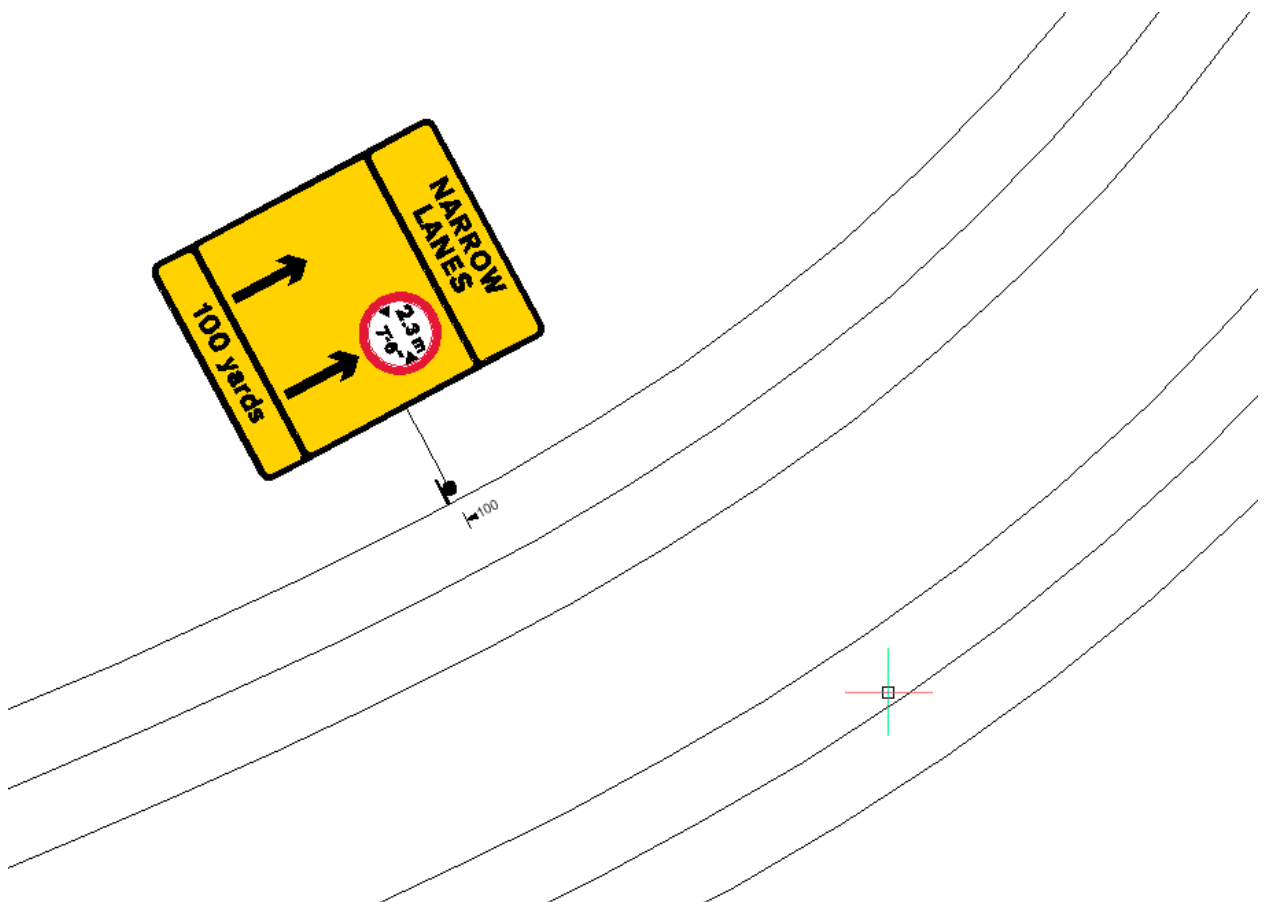
☐ Signs & symbols on one side only
☒ Signs & symbols on both sides
☐ Signs on one side, symbols on both sides

Qty ☒ 2 ☐ 1



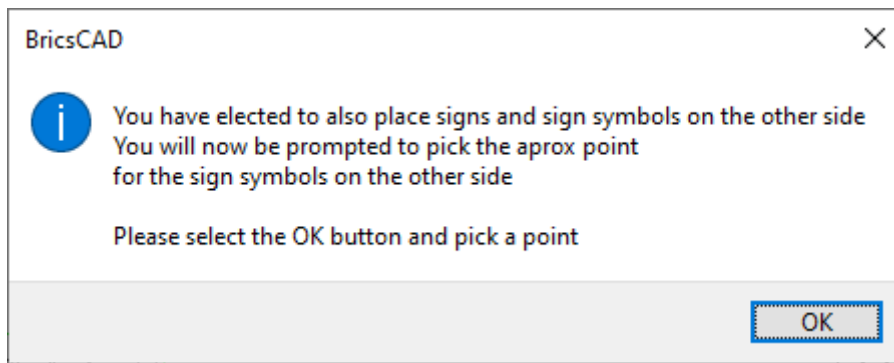
Signs & Symbols on ONE side only

This option give you a similar drawing style to the Single Carriageway Sign Arrays - see screen grab below:

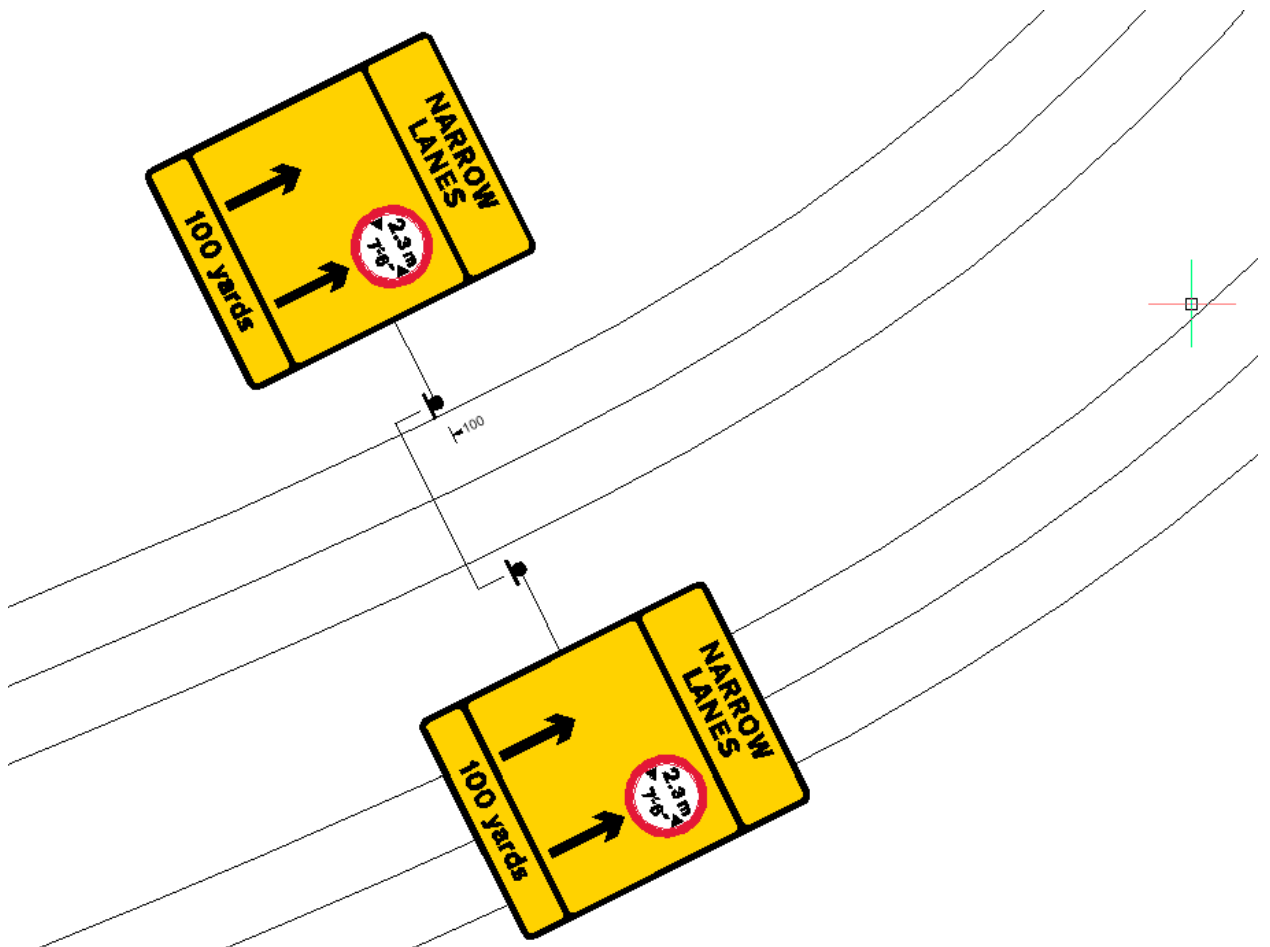


Signs & Symbols on BOTH sides

This option will prompt you for a distance to the opposite side of the carriageway

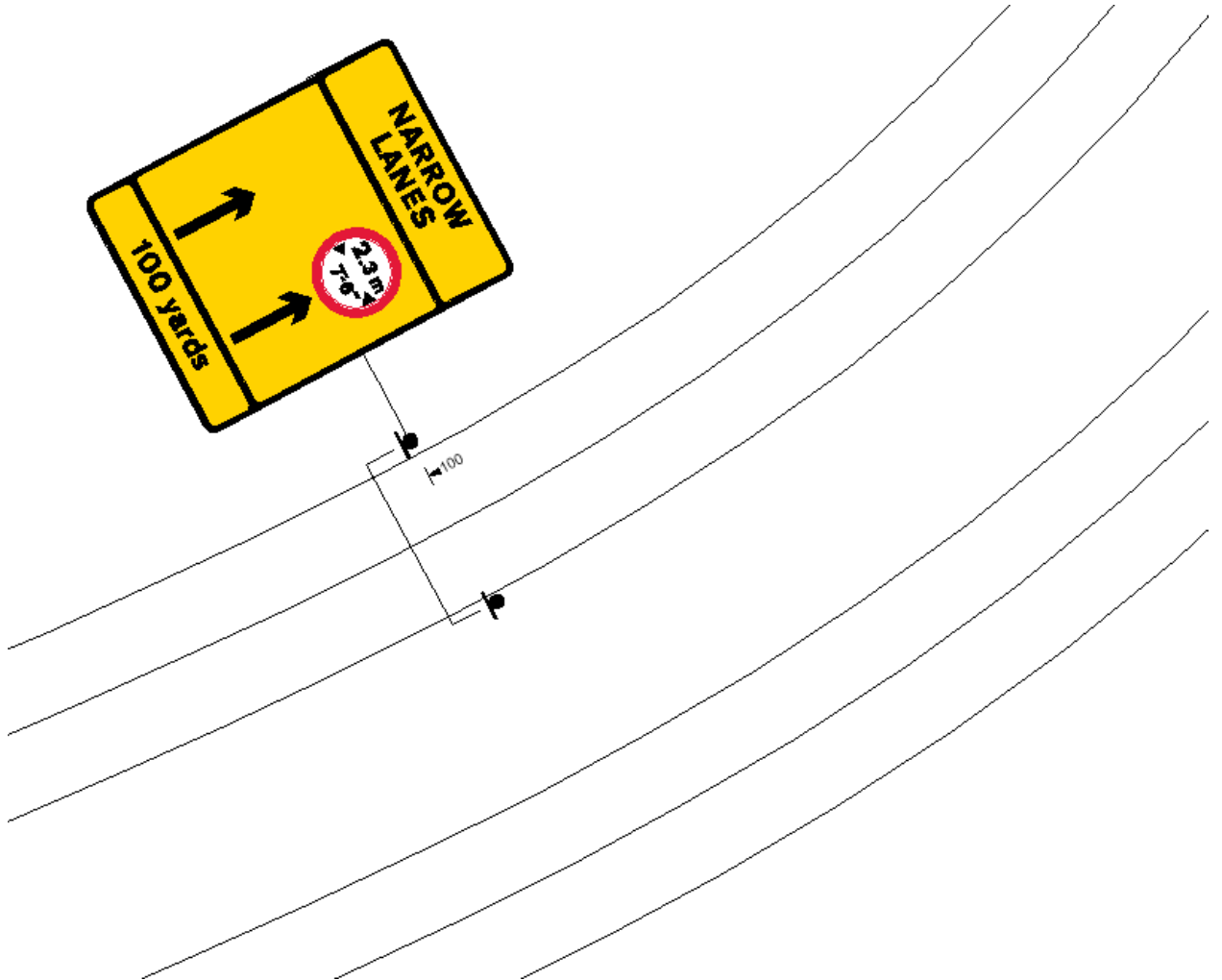


After selecting a point to use to measure the distance to the opposite side of the carriageway, the program will insert all signs in the following style:

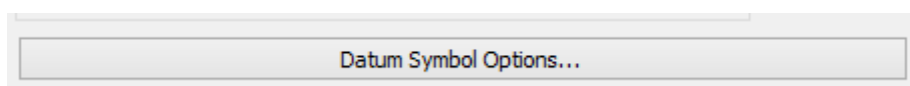


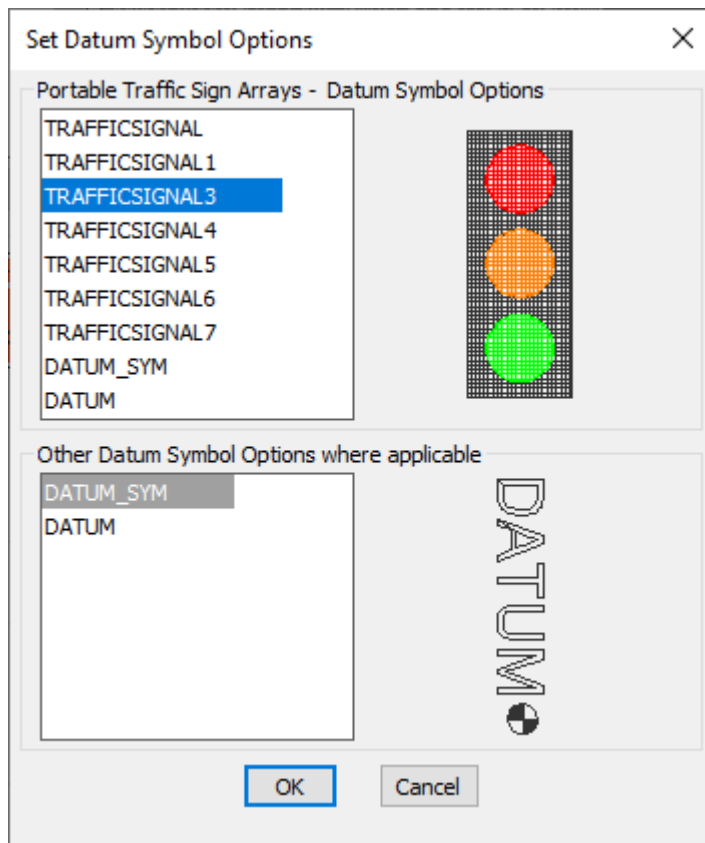
Signs on ONE side, Symbols on both sides

The final option for dual carriageway sign arrays is to insert only one sign face, but to show the position on both sides of the carriageway, again the program will prompt for a distance across the carriageway to be specified, then drawn in this style:



Datum Symbol Options



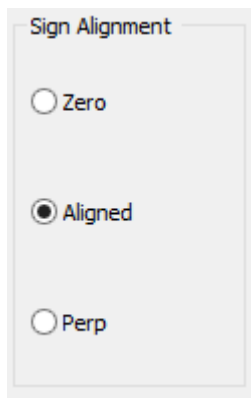


The Datum Symbol Option enables the default datum symbol that is placed at the start of a signs array to be changed

A sub dialog will load which is split into two sections

Symbols for use on Portable Traffic Sign Arrays and Other

Simple select the desired symbol an select the OK button



Sign Alignment

ZERO:

The signs will be placed upright (zero rotation)

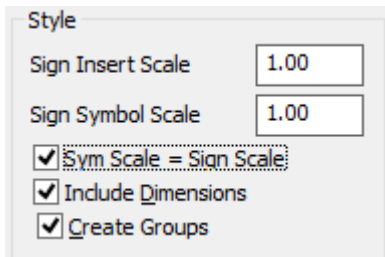
ALIGN:

The signs will be aligned parallel with the direction of the curve

PERP:

The sign will be aligned perpendicular to the direction of the curve

Style



Sign Insert Scale: (This is the same value as Global Insert Scale in PREFERENCES)

This setting defines the scale of the Sign

Assuming you are working with a setting of 1 CAD unit = 1 metre then a Insert Scale setting of 1.0 is perfect when working on schematic schemes

However if you are placing signs onto maps then you may find that an insert scale of 1.0 results in signs that are too large in proportion to the map, in which case an insert setting of 0.5 to 0.75 is recommended.

Sign Symbol Scale:

The scale of the Sign Symbol can be different to the Sign Insert Scale

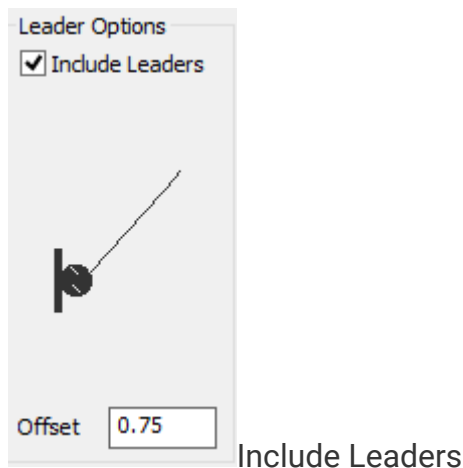
Sym Scale = Sign Scale

If this setting is checked then the Sign scale and the Sign Symbol scale are always the same

Include Dimensions: Check this option to have a dimension (the distance from the datum to the sign symbol insert point) placed on the drawing

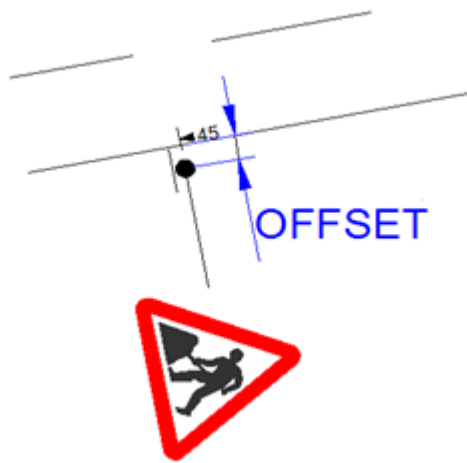
Create Groups: Check this option (recommended) and the sign symbol, leader and sign will be grouped together. Grouping permits the sign symbol, leader and sign to be moved or copied as a group

Note: The CONE Tool: Dog Leg or Stretch a Leader will only work on Grouped objects



If the Include Leaders check box is checked then the sign will be inserted attached to a sign symbol as defined by the current leader setting (Click the leader image to change)

Offset: You can also specify an Offset distance for the symbol, this is the offset distance from the points you pick on the drawing or the curve selected

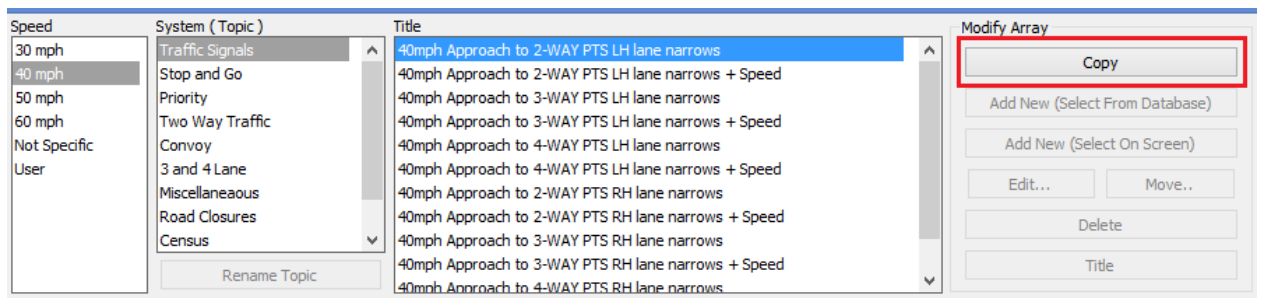


Creating a User Custom Sign Array

There are 2 methods of creating a Custom User Sign Array

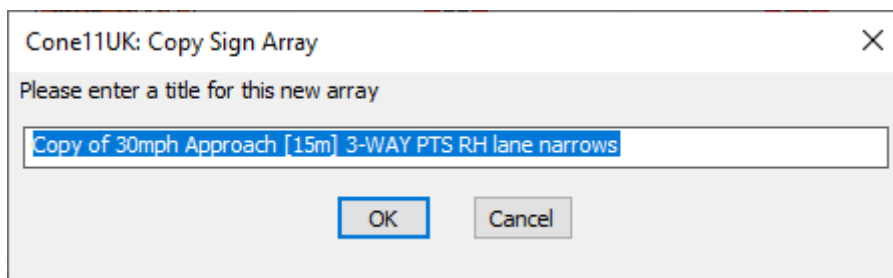
1. Make a copy of a standard array and then modify this new array
2. Create a new array from scratch (Select from Signs Database)

1. Make a copy of a standard array and then modify the new array



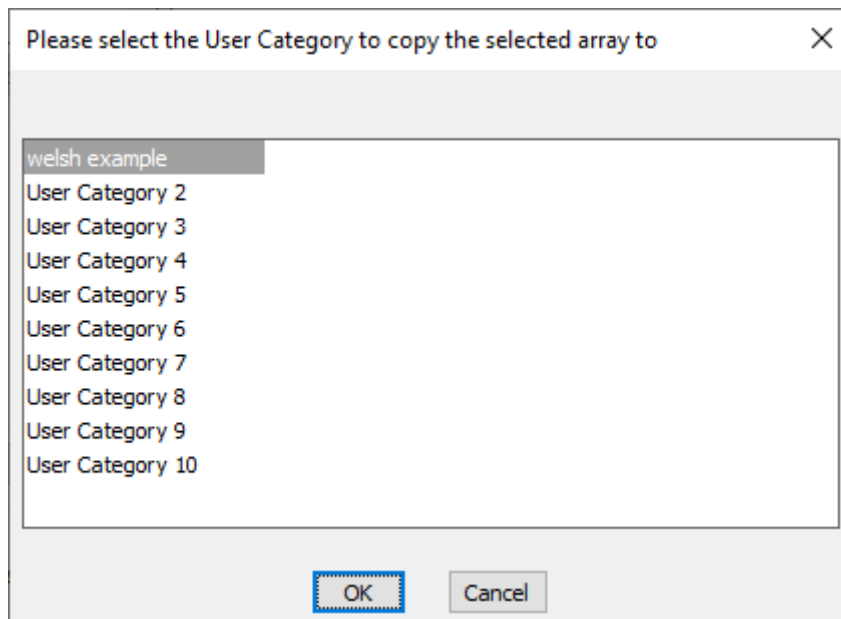
1. Use the Sign Array tool to select the array you wish to copy

2. Pick the Copy button

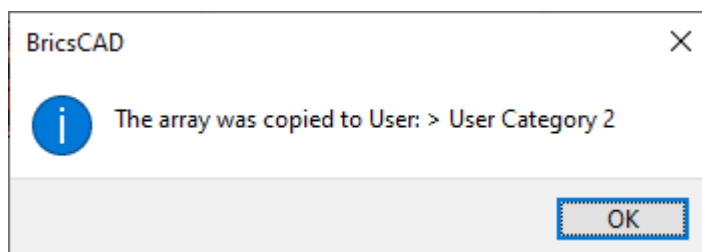


3. Enter a title for this new array and pick the OK button

4. Select the User Category that you wish to copy the selected array to and pick the OK button



The program will respond with (or similar)



5. Select User from the Speed list, then the category you chose from the System (Topic) list and then the title of the array you have just created

The screenshot shows a software interface with three main panels on the left and a 'Modify Array' panel on the right. The 'Speed' panel has a list with 'User' selected. The 'System (Topic)' panel has a list with 'User Category 1' selected. The 'Title' panel has a list with 'Copy of 40mph Approach to 2-WAY PTS LH lane narrows' selected. The 'Modify Array' panel on the right contains several buttons: 'Copy', 'Add New (Select From Database)', 'Add New (Select On Screen)', 'Edit...' (highlighted with a red box), 'Move..', 'Delete', and 'Title'.

All of the Modify Array options will become available

6. Pick the Edit button, the User Edit dialog will be displayed

User - User Category 2 - Custom 30mph Approach to 2-WAY PTS LH lane narrows

Distance	Sign or Symbol	Row
0.0	TRAFFICSIGNAL3 - Portable traffic light symbol	Add
2.0	T7011A - When Red Light Shows Wait Here	Edit
15.0	T517L - Road narrows on one side only ahead - left + T518 - Single file traffic	Delete
35.0	T543 - Traffic signals ahead	Save
45.0	T7001 - Road works ahead	Discard

Upper sign or symbol (Click to activate)



Change

Delete

Lower sign or symbol (Click to activate)



Change

Delete

Settings

Distance from datum

Quantity

☒ Attach to a leader

Select Variable Text if applicable

NOT APPLICABLE

Current Variable >

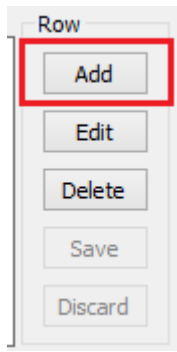
Save

Cancel

Help

The list of signs and symbols in the array are displayed in a selectable list box along with the distance from the datum, each sign or symbol is a selectable Row

The Row options are Add, Edit, Delete, Save and Discard



Add

Add: Adds an additional sign to the array, this involves selecting the additional sign from the CONE Sign Database, specifying a distance from the Datum, optionally changing the Quantity assigned to the Sign and where applicable changing the variable distance that is displayed

When you select the Add button the current image of the sign is cleared

User - User Category 2 - Custom 30mph Approach to 2-WAY PTS LH lane narrows

Distance	Sign or Symbol	Row
0.0	TRAFFICSIGNAL3 - Portable traffic light symbol	
2.0	T7011A - When Red Light Shows Wait Here	
15.0	T517L - Road narrows on one side only ahead - left + T518 - Single file traffic	
35.0	T543 - Traffic signals ahead	
45.0	T7001 - Road works ahead	

Upper sign or symbol (Click to activate)

PICK THE
CHANGE
BUTTON

Change

Delete

Lower sign or symbol (Click to activate)

CLICK ME
TO
ACTIVATE

Change

Delete

Settings

Distance from datum

Quantity

☒ Attach to a leader

Select Variable Text if applicable

NOT APPLICABLE

Current Variable >

Save

Cancel

Help

Settings

Distance from datum

Quantity

☒ Attach to a leader

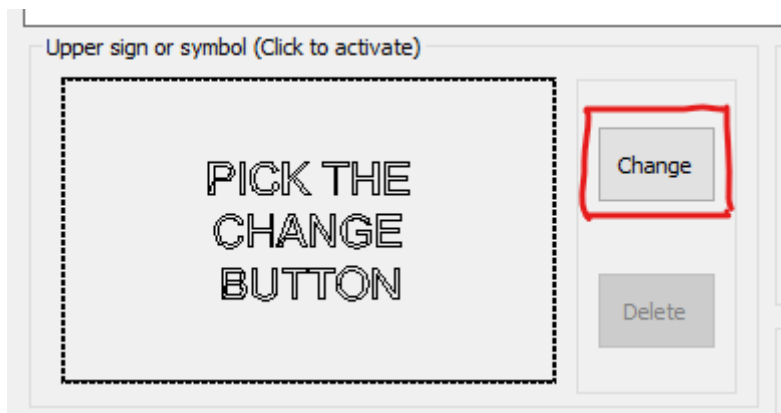
As you have elected to add an additional sign (row) you need to specify the Distance from Datum

for the additional sign

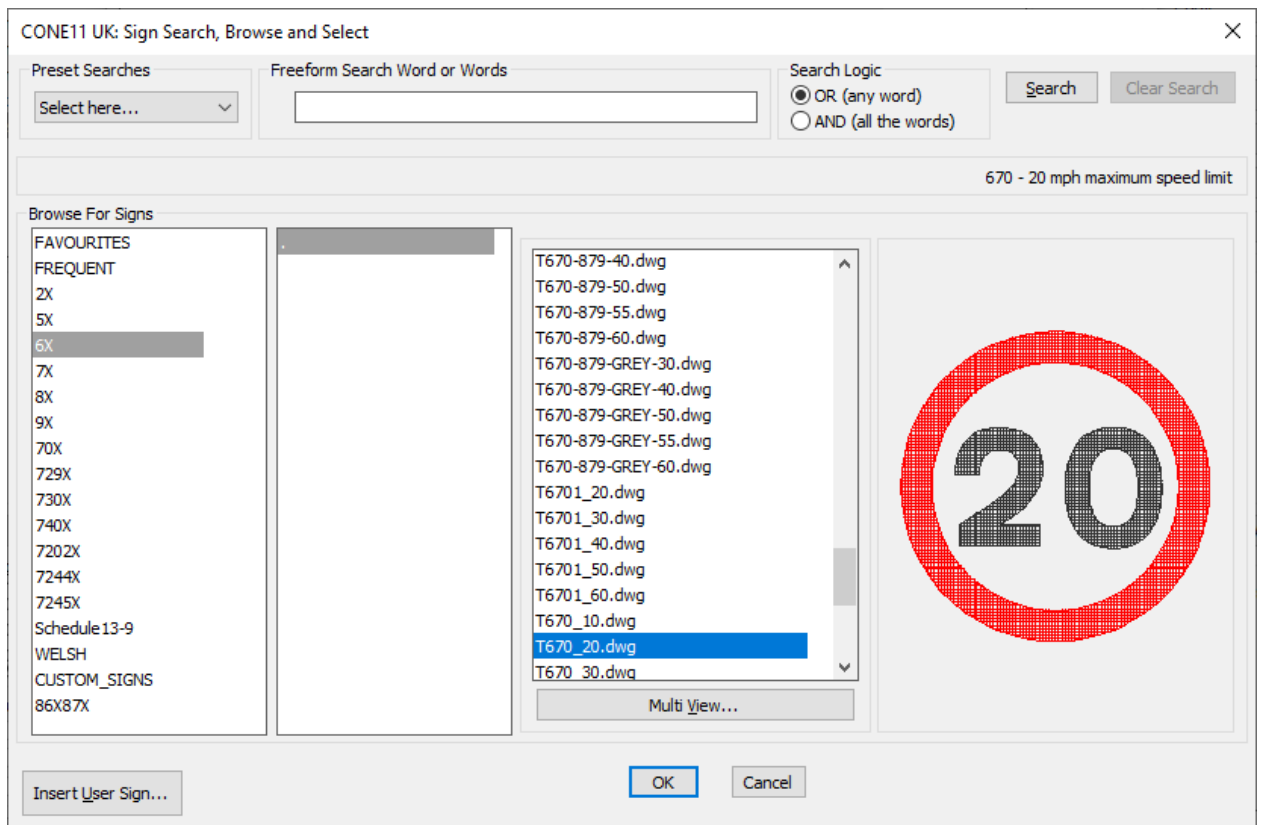
Quantity : This value is normally 1, but for Dual Carriageways the value might be set to 2

Attach to a leader : Whether the sign is attached to a leader or not

Next pick the Change button and select a sign from the Sign Select Dialog that is presented:



Example



Select the desired sign and pick the OK button, the selected sign will now be displayed thus:

Click the Save button to confirm and have the sign added to the sign array list or click the Discard button to cancel this operation

User - User Category 2 - Custom 30mph Approach to 2-WAY PTS LH lane narrows

Distance	Sign or Symbol	Row
0.0	TRAFFICSIGNAL3 - Portable traffic light symbol	Add
2.0	T7011A - When Red Light Shows Wait Here	Edit
15.0	T517L - Road narrows on one side only ahead - left + T518 - Single file traffic	Delete
35.0	T543 - Traffic signals ahead	Save
45.0	T7001 - Road works ahead	Discard

Upper sign or symbol (Click to activate)



Change

Delete

Settings

Distance from datum: 15.0

Quantity: 1

☒ Attach to a leader

Select Variable Text if applicable

NOT APPLICABLE

Distance ----- Sign or Symbol

0.0	TRAFFICSIGNAL3 - Portable traffic light symbol
15.0	T7011A - When Red Light Shows Wait Here
35.0	T517L - Road narrows on one side only ahead - left + T518 - Single file traffic
50.0	T670_20 - 20 mph maximum speed limit
65.0	T543 - Traffic signals ahead
100.0	T7001 - Road works ahead

Upper sign or symbol (Click to activate)



Change

Delete

Settings

Distance from datum: 50.0

Quantity: 1

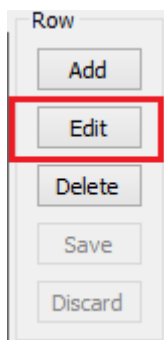
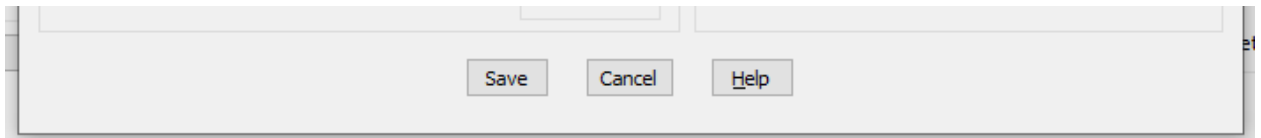
☒ Attach to a leader

Select Variable Text if applicable

NOT APPLICABLE

The distances from the datum for each sign can easily be changed by simply selecting the sign (row) to be changed, enter a revised distance and pick the Rows Save button

When you are happy with your new array pick the Save button at the bottom of the dialog to save and return to the main Sign Array dialog



Edit:

The Row : Edit button enables you to change the current selected sign (row)

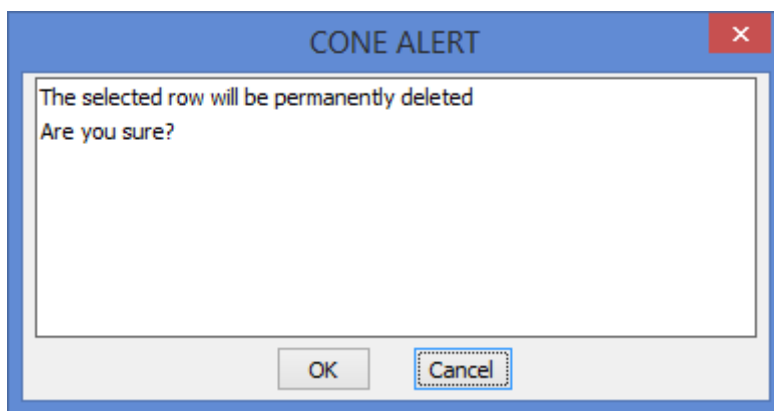
This may involve selecting a different sign or changing the distance from the datum

First select the sign you wish to change from the sign array list and then pick the Edit button

Now either enter a new distance or pick the Change button to select a different sign (the method is the same as previously described as for the Add action)

Click the Save button to confirm or click the Discard button to cancel this operation

Delete



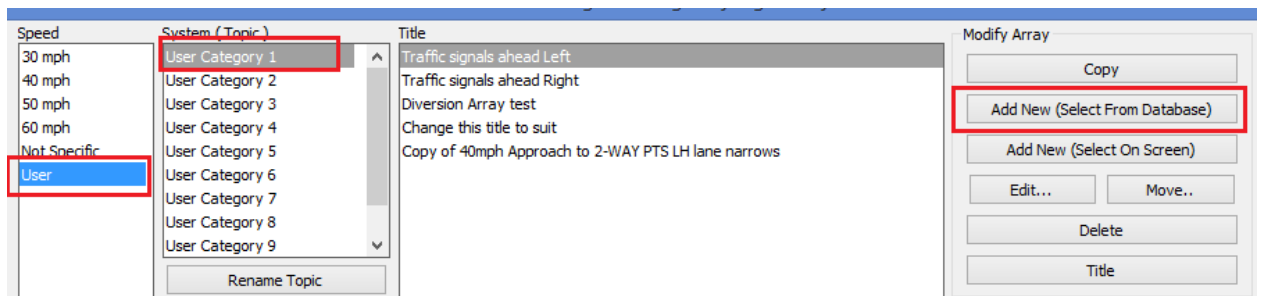
The Row : Delete button removes the selected sign from the array list

Select the sign you want to delete in the main array list box Press the Delete button

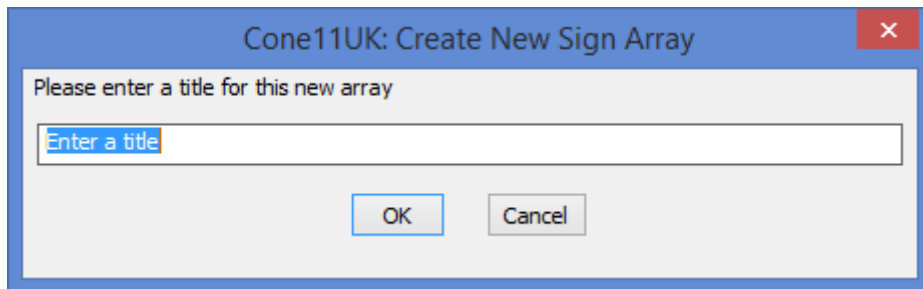
Confirm your action

Creating a User Custom Sign Array

2. Create a new array from scratch (Select from Signs Database)



To create a User Custom Sign Array from scratch first select User from the Speed list box, then select the User Category that you wish to place the new array in from the System (Topic) list then pick the



Add New (Select From Database) button

You will be prompted to enter a title for the new array

Pick the OK button to proceed

The Edit Sign Array dialog will now be displayed, with just one row (The Datum Symbol) included

User - User Category 1 - Enter a title

Distance	Sign or Symbol	Row
0.0	DATUM_SYM - Datum symbol	Add Edit Delete Save Discard

Upper sign or symbol (Click to activate)



Change

Delete

Lower sign or symbol (Click to activate)

Change

Delete

Settings

Distance from datum

Quantity

☐ Attach to a leader

Select Variable Text if applicable

NOT APPLICABLE

Current Variable >

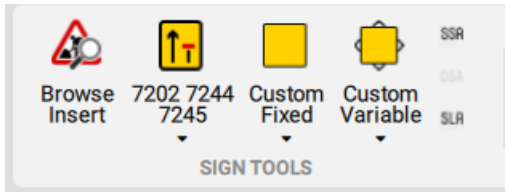
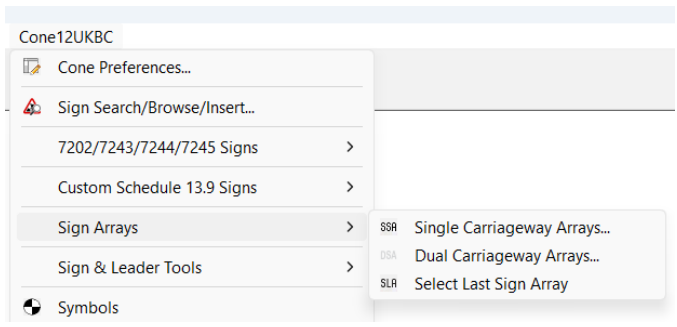
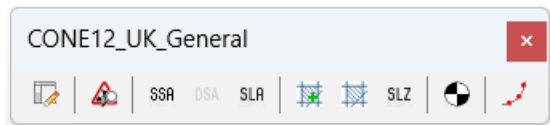
Save

Cancel

Help

Signs are added and saved to the array in exactly the same manner as the previous section

Sign Arrays - Select Last Sign Array

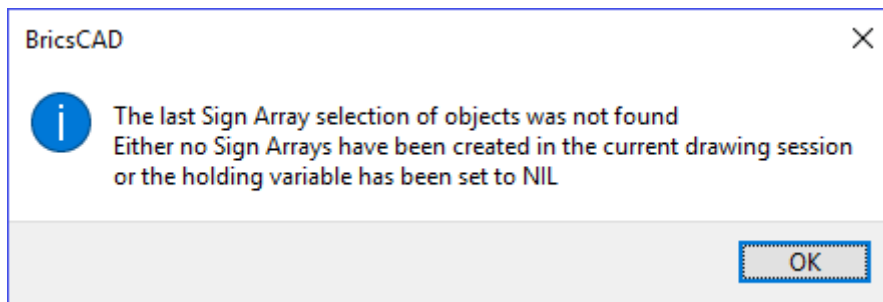
Command: CUKLASTSA RIBBON: CONE12 Main: SIGN TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR CONE12_UK_Sign_General	

This command will select the elements inserted onto the drawing the last time the Sign Array feature is used.

The selected elements can then be moved/copied or erased using the standard CAD editing commands.

NOTE: this feature will not work if the drawing has been closed and re-opened.

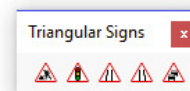
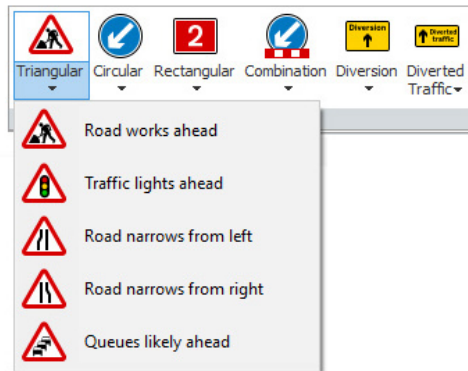
If the program cannot select the array entities, it will display the following message dialog:



Frequently Used Signs - Triangular

RIBBON: CONE12 Main Frequent Signs> Triangular

Toolbars: Cone Insert Frequent Signs and Triangular Signs



The Frequent Signs Triangular Signs tools, only appear in the RIBBON: CONE12 Main Frequent Signs and the toolbars, there are no options in the pull-down menus or Command

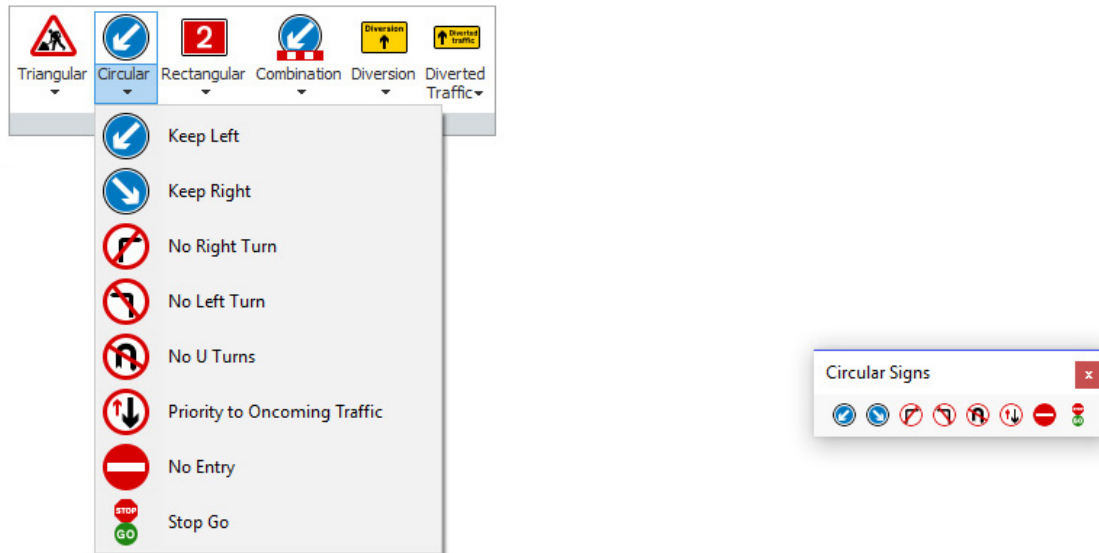
Select one of the available signs and it will be inserted into the current drawing using the same Sign and Leader settings as set in the SIGN SEARCH / BROWSE / INSERT dialog

If using the ribbon bar interface, the last selected sign will be remain displayed in the ribbon bar, so making it easier to select a subsequent time.

Frequently Used Signs - Circular

RIBBON: CONE12 Main Frequent Signs> Circular Signs

Toolbars: Cone Insert Frequent Signs and Circular Signs



The Frequent Signs Circular Signs tools, only appear in the Ribbon CONE 12 Main and the toolbars, there are no options in the pull-down menus or Command

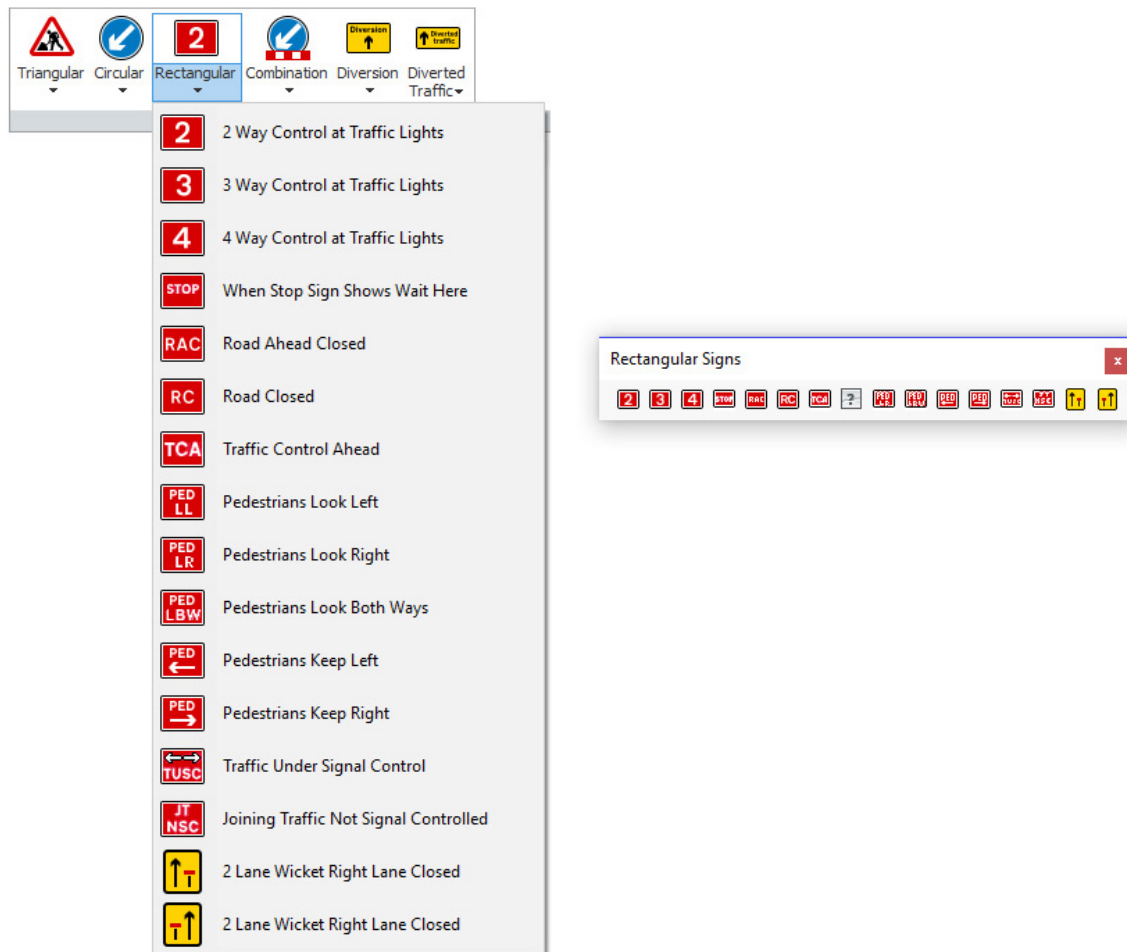
Select one of the available signs and it will be inserted into the current drawing using the same Sign and Leader settings as set in the SIGN SEARCH / BROWSE / INSERT dialog

If using the ribbon bar interface, the last selected sign will be remain displayed in the ribbon bar, so making it easier to select a subsequent time

Frequent Signs - Rectangular Signs

RIBBON: CONE12 Main Frequent Signs > Rectangular

TOOLBAR: Rectangular Signs



The Frequent Signs Rectangular Signs tools, only appear in the Ribbon CONE 12 Main and the toolbars, there are no options in the pull-down menus or Command

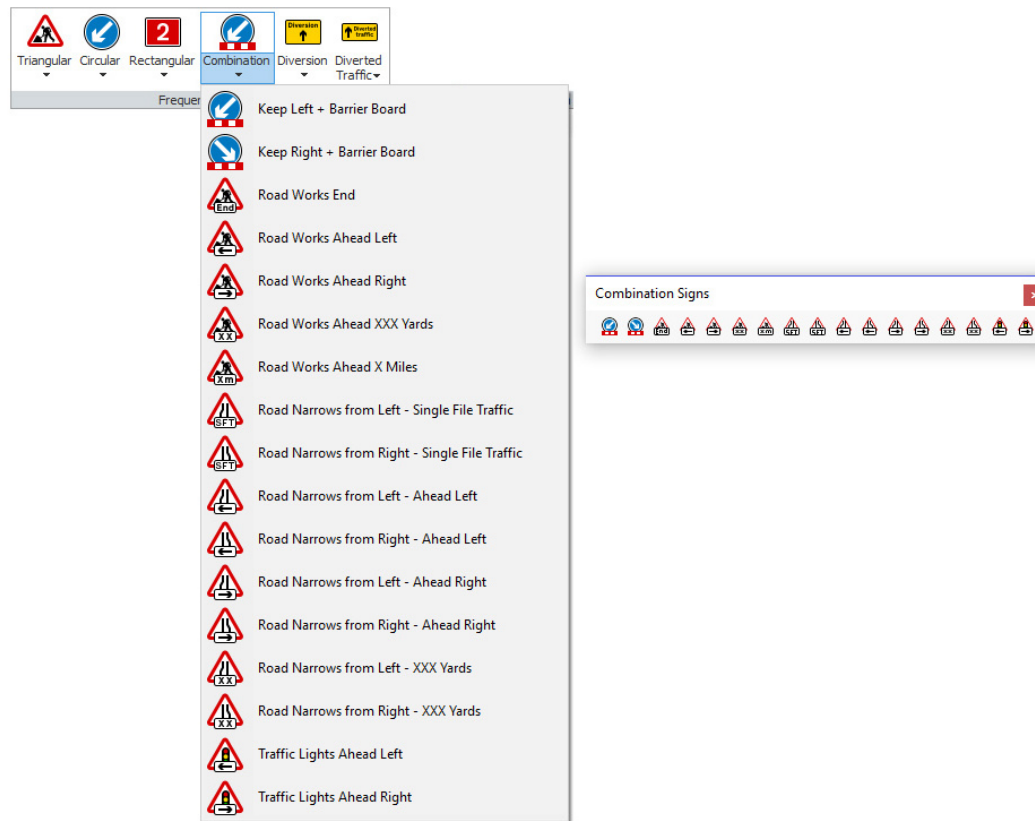
Select one of the available signs and it will be inserted into the current drawing using the same Sign and Leader settings as set in the SIGN SEARCH / BROWSE / INSERT dialog

If using the ribbon bar interface, the last selected sign will be remain displayed in the

ribbon bar, so making it easier to select a subsequent time.

Frequent Signs - Combination Signs

RIBBON CONE12 Main Frequent Signs > Combination Signs



The Frequent Signs Combination Signs tools, only appear in the RIBBON: CONE12 Main and the toolbars, there are no options in the pull-down menus. These are the most common pairs of signs to be inserted on TM drawings. By inserting as a pair there is only one leader line to the sign symbol position on the kerb.

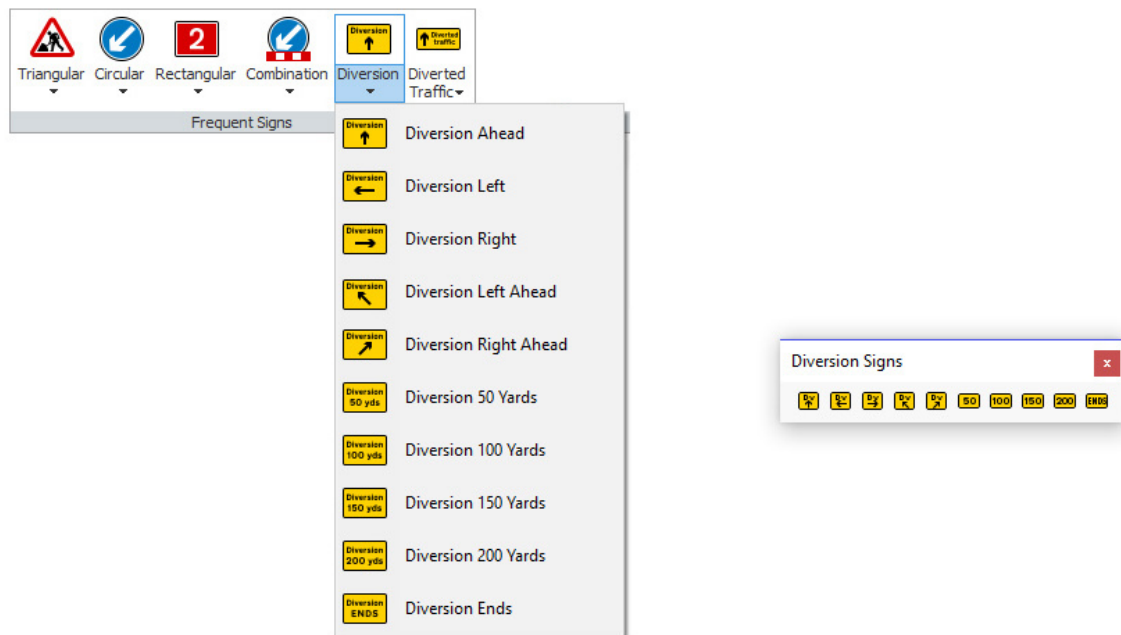
One of the most useful combinations is the Road Works Ends, as this combination sign pair is not automatically added when using the Sign Arrays function.

Select one of the available signs and it will be inserted into the current drawing using the same Sign and Leader settings as set in the SIGN SEARCH / BROWSE / INSERT dialog

If using the ribbon bar interface, the last selected sign will be remain displayed in the ribbon bar, so making it easier to select a second time.

Frequent Signs - Diversion Signs

CONE12 Main Frequent Signs > Diversion Signs



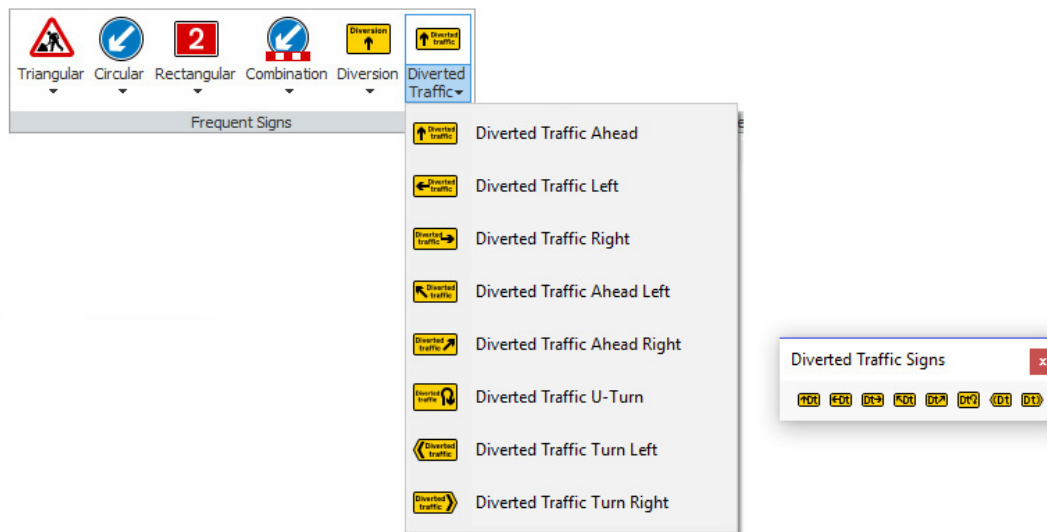
The Frequent Signs Diversion Signs tools, only appear in the RIBBON: CONE12 Main and the toolbars, there are no options in the pull-down menus. Use these in combination with the Diverted Traffic Signs adjacent on the ribbon bar, but a separate toolbar. Additional and more complex diverted traffic signs can be created using the Custom Fixed Size and Custom Variable Size tools in the Sign Tool section

Select one of the available signs and it will be inserted into the current drawing using the same Sign and Leader settings as set in the SIGN SEARCH / BROWSE / INSERT dialog

If using the ribbon bar interface, the last selected sign will be remain displayed in the ribbon bar, so making it easier to select a second time.

Frequent Signs - Diverted Traffic Signs

CONE12 Main Frequent Signs >Diverted Traffic Signs

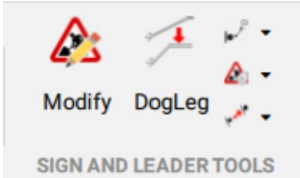
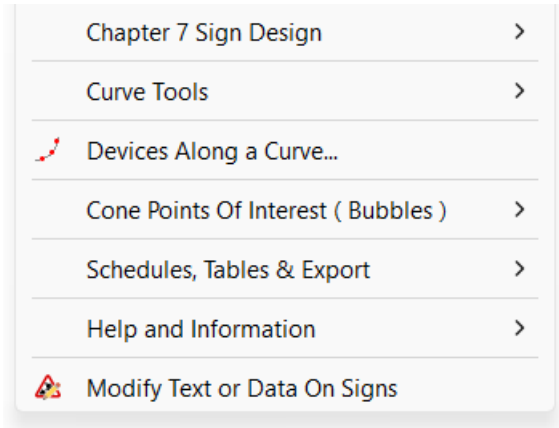


The Frequent Signs Diverted Traffic Signs tools, only appear in the Ribbon bar Part 1 and the toolbars, there are no options in the pull-down menus. Use these in combination with the Diversion Signs adjacent on the ribbon bar, but a separate toolbar. Additional and more complex diverted traffic signs can be created using the Custom Fixed Size and Custom Variable Size tools in the Sign Tool section

Select one of the available signs and it will be inserted into the current drawing the same Sign and Leader settings as set in the SIGN SEARCH / BROWSE / INSERT dialog

If using the ribbon bar interface, the last selected sign will be remain displayed in the ribbon bar, so making it easier to select a subsequent time.

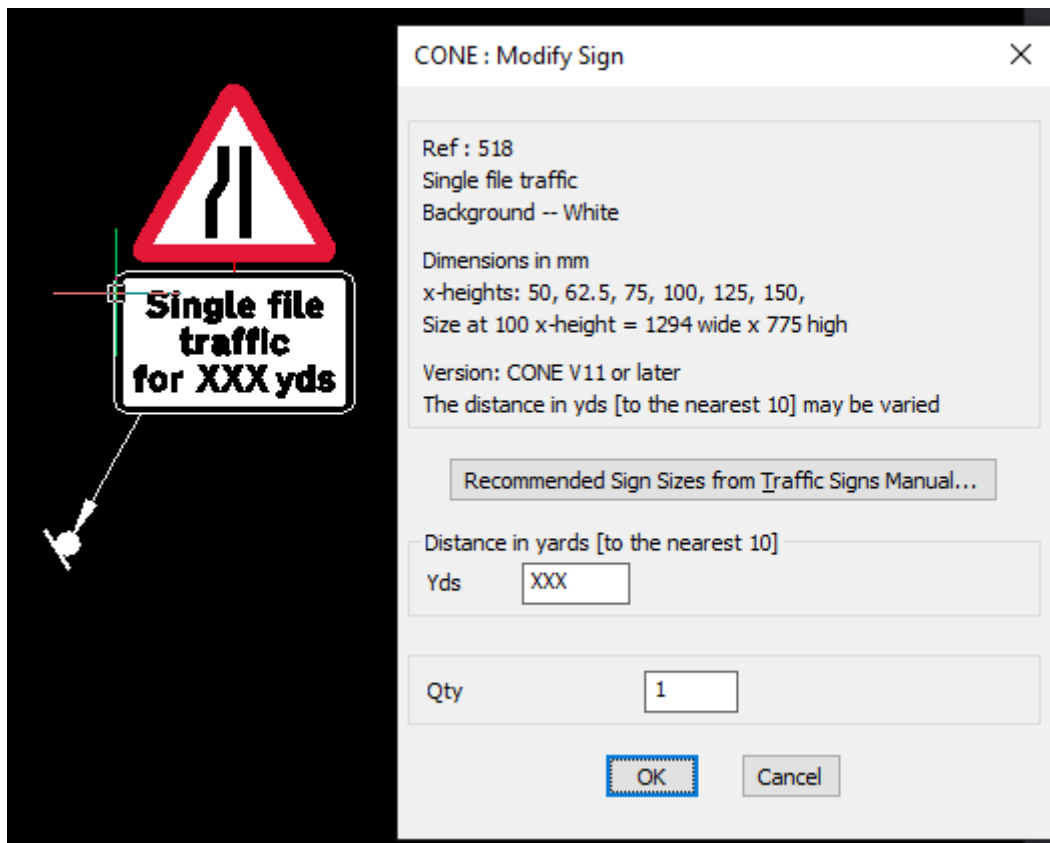
Sign & Leader Tools - Modify Text or Data On Signs

Command: CUKMODSIGN RIBBON: CONE12 Main: SIGN AND LEADER TOOLS	
CONE12UKBC Pull Down Menu	
CONE12_UK_Sign_Utilities	

This function allows you to change or modify the user-editable text on a sign.

DO NOT explode the signs, or double click on the sign to try and edit the definition of the sign block, this may cause other problems on the drawing, or when producing a bill of quantities.

Select a CONE sign to query or edit: click on the EDGE of the sign-face, NOT the sign symbol, the dialog shown below will be displayed



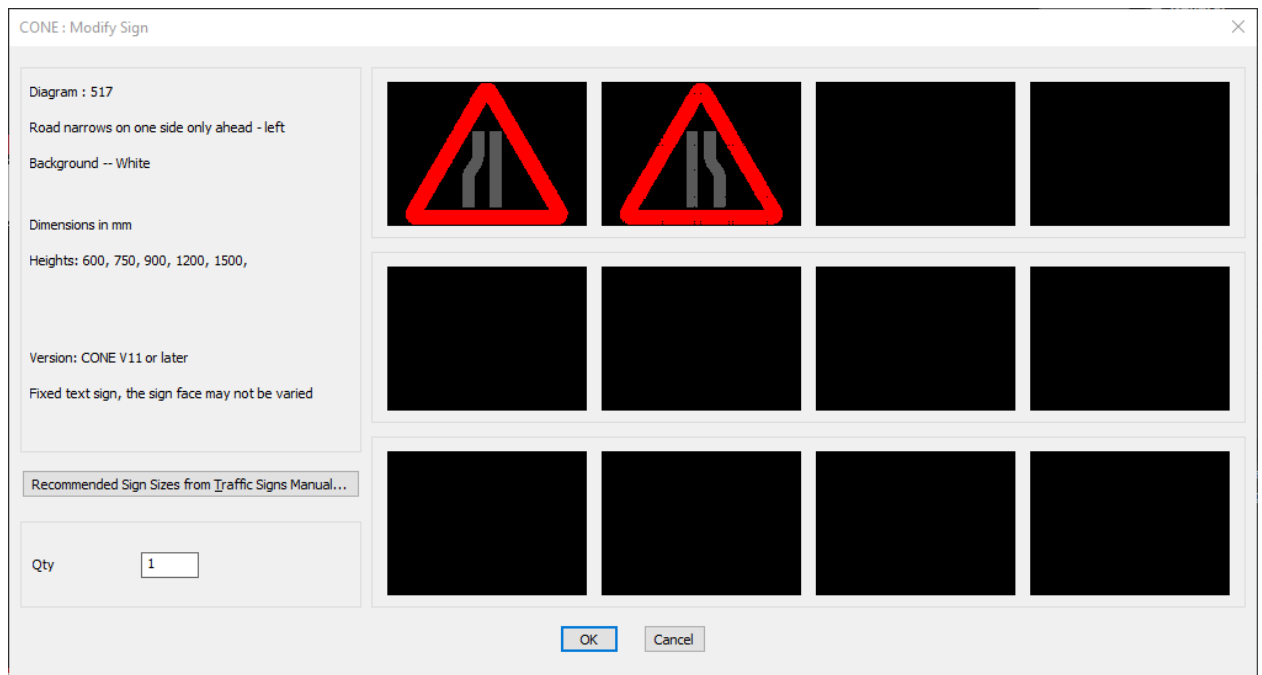
If a sign with editable text is selected, you can modify the value of the editable text,

NOTE: due to the use of individual characters to recreate the Transport medium and Transport Heavy fonts, you MUST use this method to edit the signs, DO NOT explode the blocks as they cannot be edited as text entities.

The dialog gives guidance of the value to enter here above “[to the nearest 10]”, however, there is no value checking to the text entered.

If the length of the text entered is significantly longer/shorter than existing, the sign plate size will be adjexted.

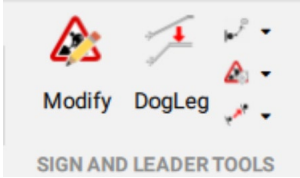
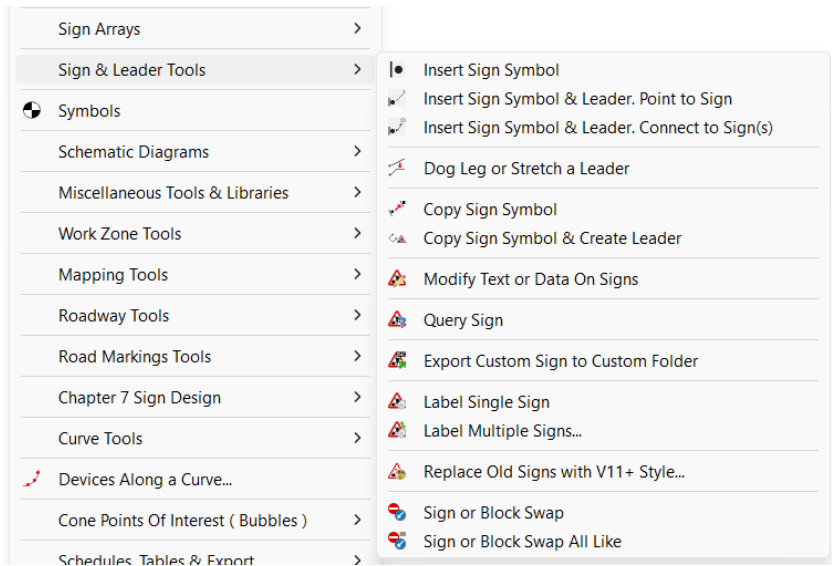
If the sign selected has no editable text but is part of a set of signs, those signs will be displayed and you may select an alternative sign plate to swap



Finally, if you select a custom sign you have created using the “Custom Fixed Plate Size” or “Custom Variable Plate Size” tools, the relevant dialog will be displayed, set to the values when the sign was created allowing you to change every and all aspect of the information on the sign.

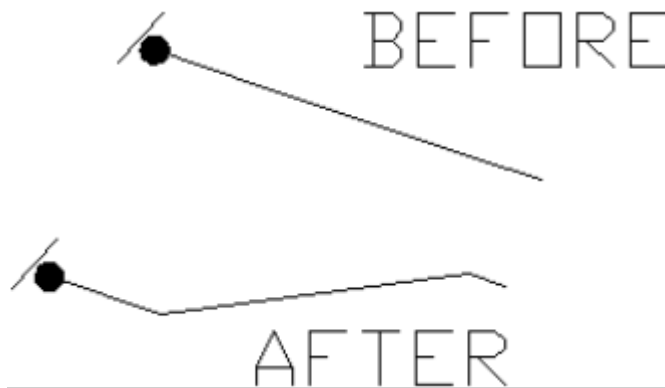
Sign & Leader Tools - Dog Leg or Stretch a Leader

RIBBON: CONE11 Part 1: Sign and Leader Tools

Command: CUKDOGLEG RIBBON: CONE12 Main: SIGN AND LEADER TOOLS	
CONE12UKBC Pull Down Menu	
CONE12_UK_Sign_Utilities	

Leader lines are used to link the Sign Symbols and the view of the sign face.

Occasionally, you will want to break the straight line to increase legibility of the drawing.



Example

If you have drawn a sign & leader line together using the “Sign Search/Browse/Insert...” dialog, they will be linked and the program will know to move the sign face as the leader is dog-legged. If drawn separately using the previous “Insert a Sign Symbol and Leader Line” command, it is possible to move the sign face by manually selecting the associated sign

After selecting the command, follow the prompts as appear below:

Select a Leader pick the leader line you wish to dog-leg

Leader is not connected, select objects that are connected to the leader or press enter to ignore:

Select objects: select any un-linked sign face (if required), then press [ENTER]

Pick new Leader end point: move mouse to new position and left-click

Before picking the final position, it is possible to use the keyboard options by pressing one of the keys below:

A – Align Will align the bottom edge of the sign face to the same rotation angle as the sign symbol

P – Perpendicular Will align the bottom edge of the sign face perpendicular to the sign symbol, usually putting it parallel to the kerb

Z – Zero Sets the sign face to Zero rotation i.e. top of sign to top of drawing

R – Rotate Allows user to rotate the sign face to any angle required, move the mouse cursor. To rotate the sign face about its centre point, then left click the mouse to set the rotation and return to the dog leg routine.

S - Symbol-Rotate Alter the rotation of the sign symbol, useful if the sign has been repositioned and the angle of the kerb is different. NOTE After left clicking the mouse to specify a new rotation, if the sign face rotation is set to ALIGN it will automatically be rotated to the new angle

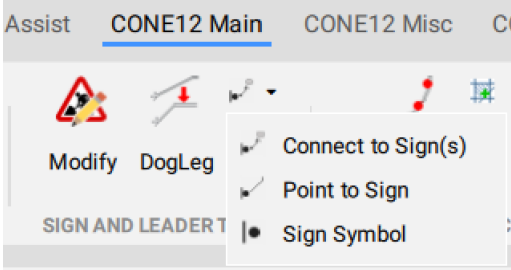
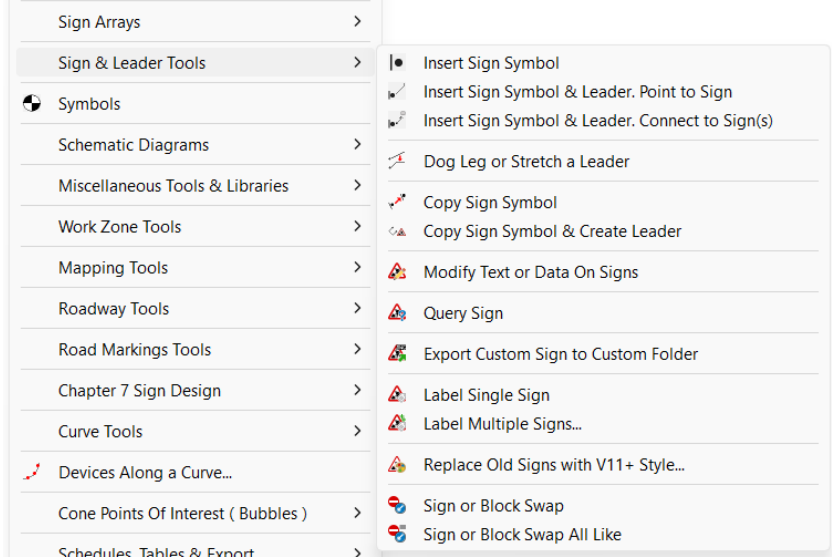
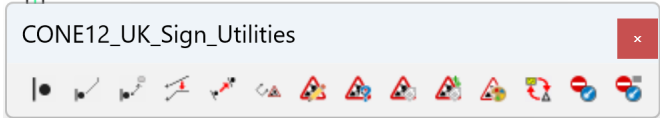
TOGGLE OPTIONS:

O – Ortho draws the leader line at 90 degrees to the kerb, then at 90 degrees to the sign face

D – Dogleg draws a short length of the leader line at 90 degrees to the kerb, then diagonally to the sign face

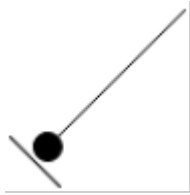
M – Mirror Symbol will rotate the sign symbol 180 degrees

Sign & Leaders Tool - Insert Sign Symbol & Leader. Connect to Sign(s)

Command: CUKSLEADER2 RIBBON: CONE12 Main: SIGN AND LEADER TOOLS	
CONE12UKBC Pull Down Menu	
CONE12_UK_Sign_Utilities	

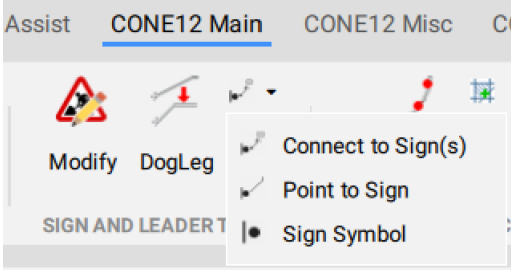
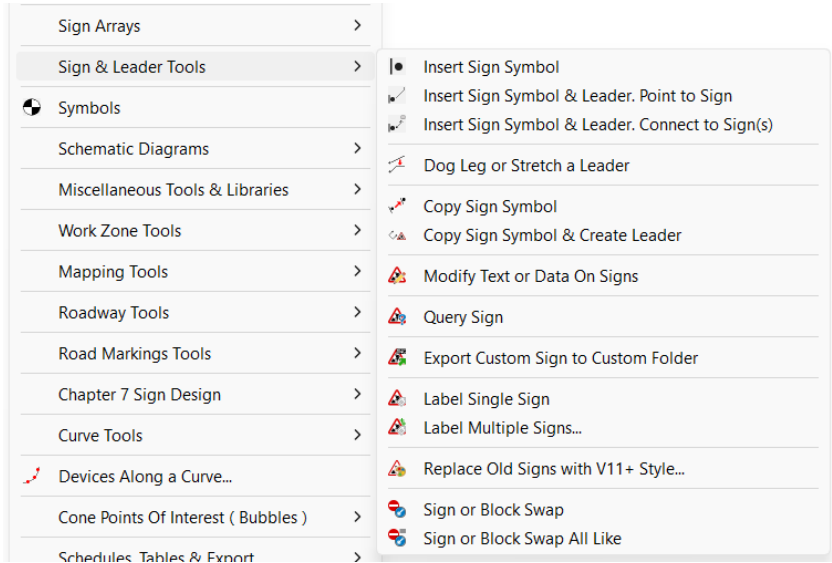
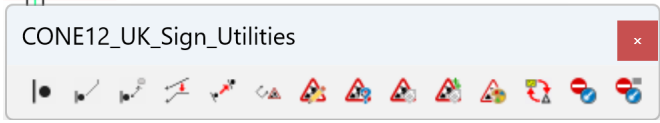
Sign Symbols are used to specify the position of the sign on the drawing, when the space is limited or it is a detailed/ complex drawing, whilst the leader line is a link to a view of the actual sign face.

Example



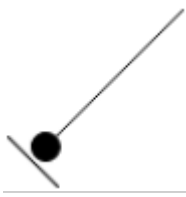
The routine prompts are the same as the previous option “Insert a Sign Symbol” once the sign symbol is positioned and rotated, you are then prompted to “Pick Leader Line End Point” which will then draw the leader line on your drawing.

Sign & Leader Tools - Insert Sign Symbol & Leader. Point to Sign

Command: CUKSLEADER RIBBON: CONE12 Main: SIGN AND LEADER TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR: CONE12_UK_Sign_Utilities	

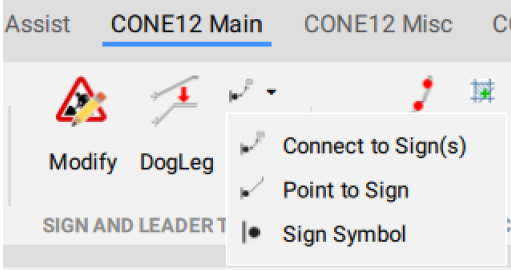
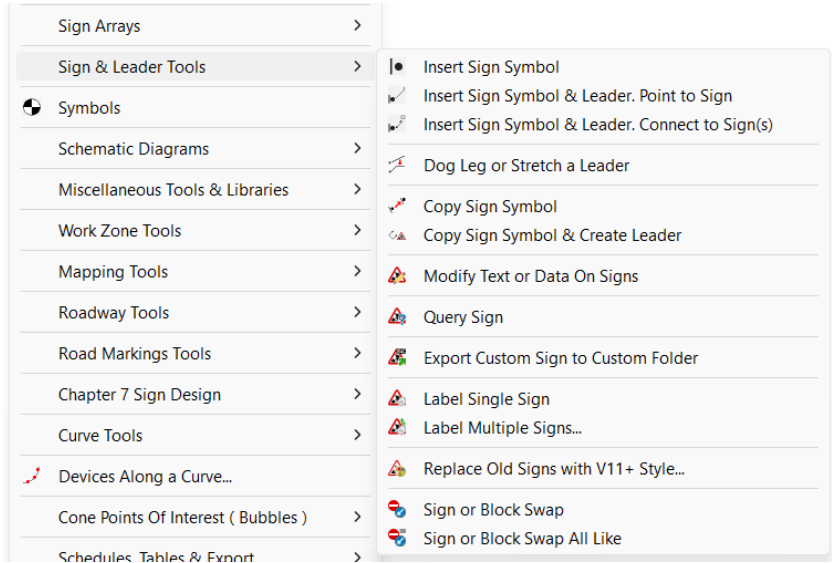
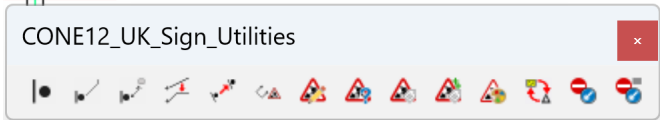
Sign Symbols are used to specify the position of the sign on the drawing, when the space is limited or it is a detailed/ complex drawing, whilst the leader line is a link to a view of the actual sign face.

Example



The routine prompts are the same as the previous option “Insert a Sign Symbol” once the sign symbol is positioned and rotated, you are then prompted to “Pick Leader Line End Point” which will then draw the leader line on your drawing.

Sign & Leader Tools - Insert Sign Symbol

Command: CUKSIGNSYM RIBBON: CONE12 Main: SIGN AND LEADER TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR: CONE12_UK_Sign_Utilities	

Sign Symbols are used to specify the position of the sign on the drawing, when the space is limited or it is a detailed/complex drawing

Example

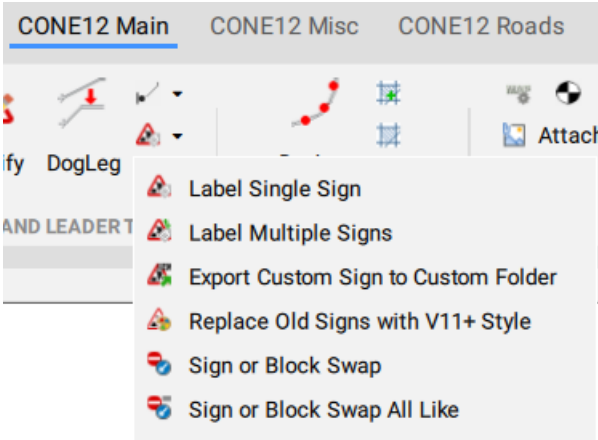
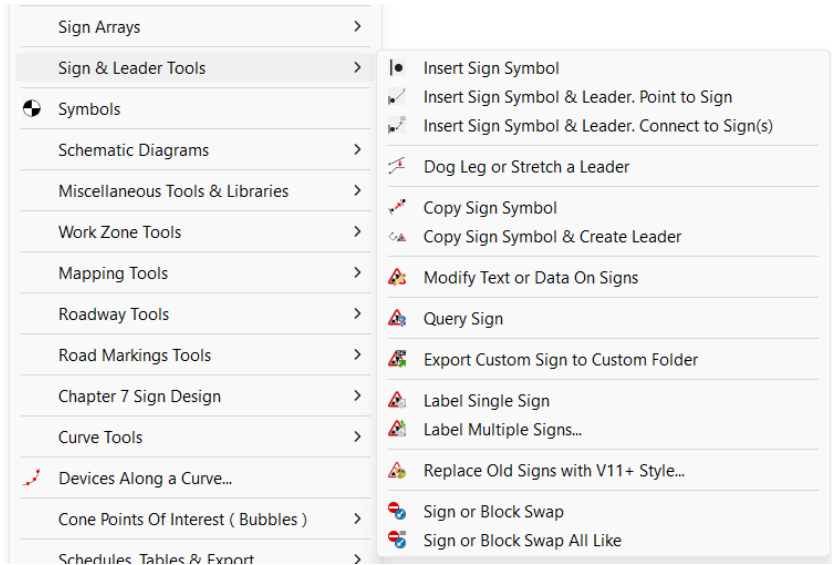


Select the command from the menu or toolbar, The parent CAD program will insert the sign symbol in the centre of the screen and prompt you for a position to place the symbol.

After left clicking the mouse to position the sign symbol. You are prompted for a rotation angle.

Specify the angle by either dragging and clicking the mouse or typing a value and pressing [ENTER]

Sign & Leader Tools - Label Single Sign

Command: CUKSLABEL RIBBON: CONE12 Main: SIGN AND LEADER TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR: CONE12_UK_Sign_Uilities	

RIBBON: CONE11 Part 1: Sign and Leader Tools

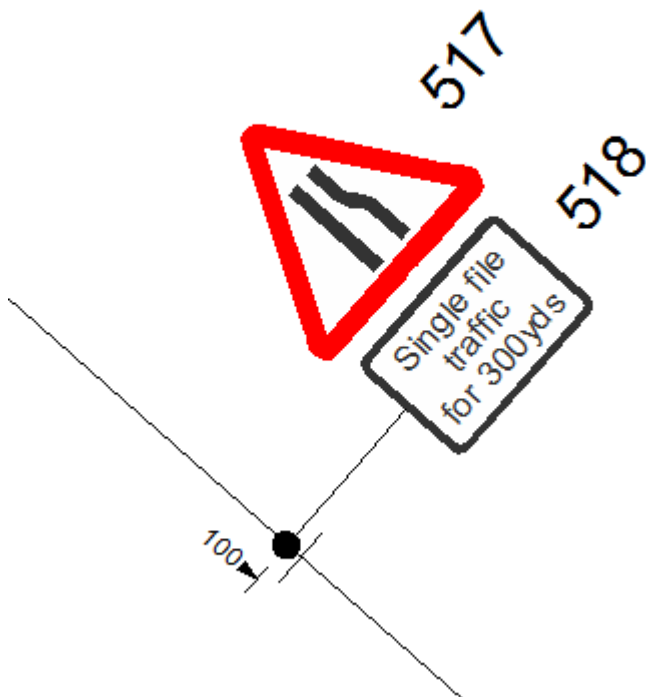
This function allows you to add a text label showing the sign number next to any traffic sign.

After selecting the function from the menu, you will be prompted as follows:

Select a sign to label: select the traffic sign on the drawing

Pick label insert point move then left-click the mouse to position the text

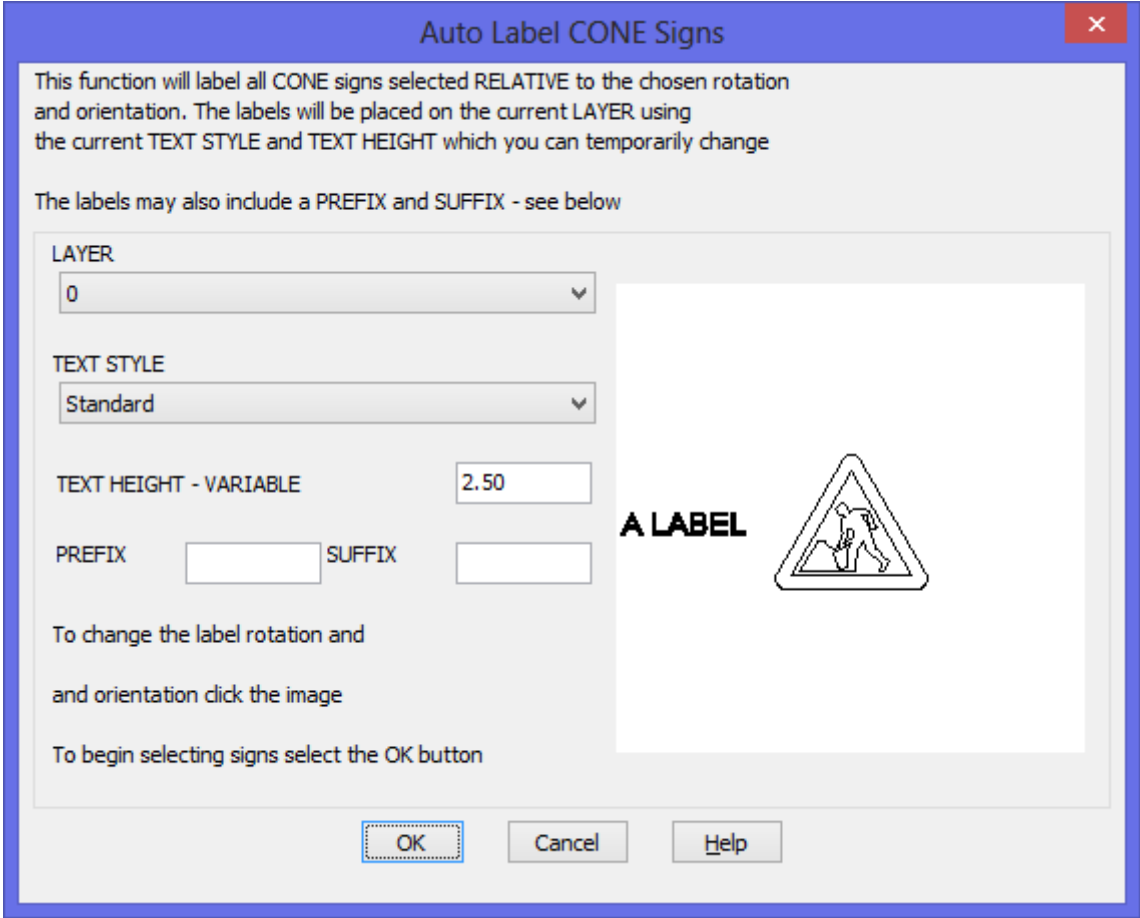
Specify rotation angle or [Copy/Reference] <0>: click mouse to rotate the text, or press [ENTER]



Sign & Leader Tools - Label Multiple Signs

RIBBON: CONE11 Part 1: Sign and Leader Tools

After selecting the function from the menu, the following dialog will be displayed:



The dialog box is titled "Auto Label CONE Signs" and has a red close button in the top right corner. It contains the following text and controls:

This function will label all CONE signs selected RELATIVE to the chosen rotation and orientation. The labels will be placed on the current LAYER using the current TEXT STYLE and TEXT HEIGHT which you can temporarily change

The labels may also include a PREFIX and SUFFIX - see below

LAYER
0

TEXT STYLE
Standard

TEXT HEIGHT - VARIABLE 2.50

PREFIX **SUFFIX**

To change the label rotation and orientation click the image

To begin selecting signs select the OK button

A LABEL 

OK Cancel Help

The options are from top to bottom:

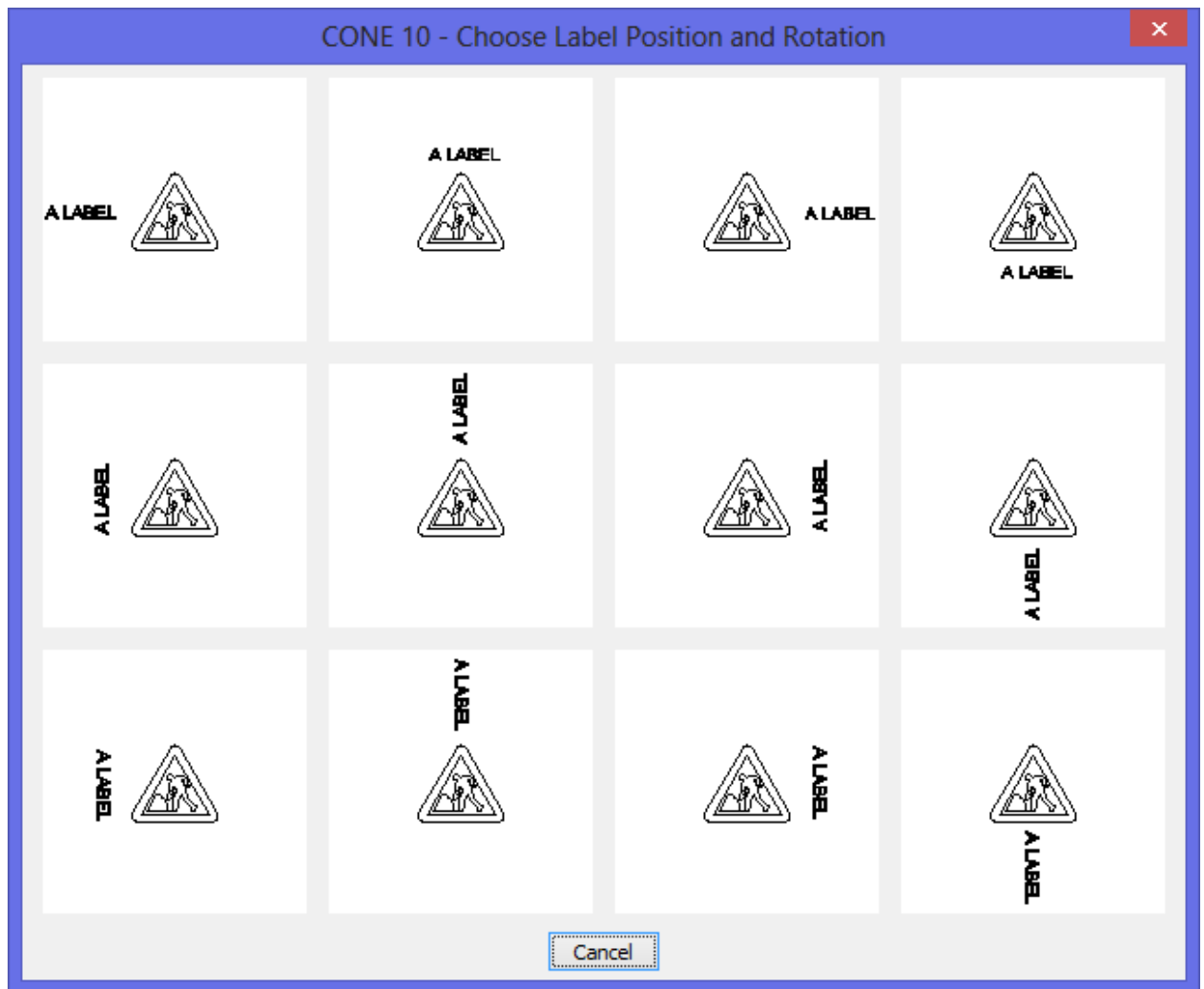
LAYER: select from the list of layers on the current drawing.

TEXT STYLE: select from the list of defined text styles in the current drawing

TEXT HEIGHT: enter the text height for the labels, (in drawing units)

PREFIX & SUFFIX: Enter a string to appear BEFORE and/or AFTER the sign number

To change the placement of the label, click on the sign icon, the following dialog shows the options available to select.

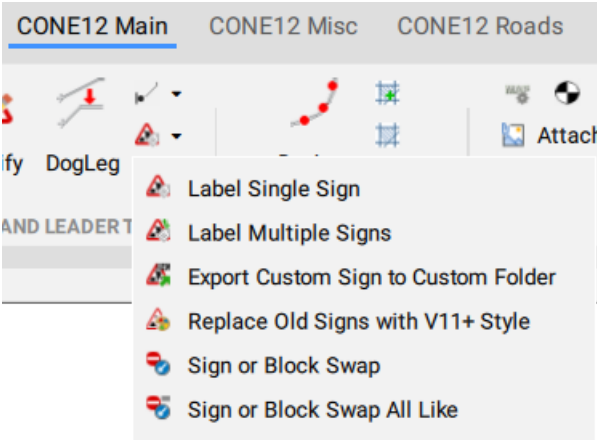
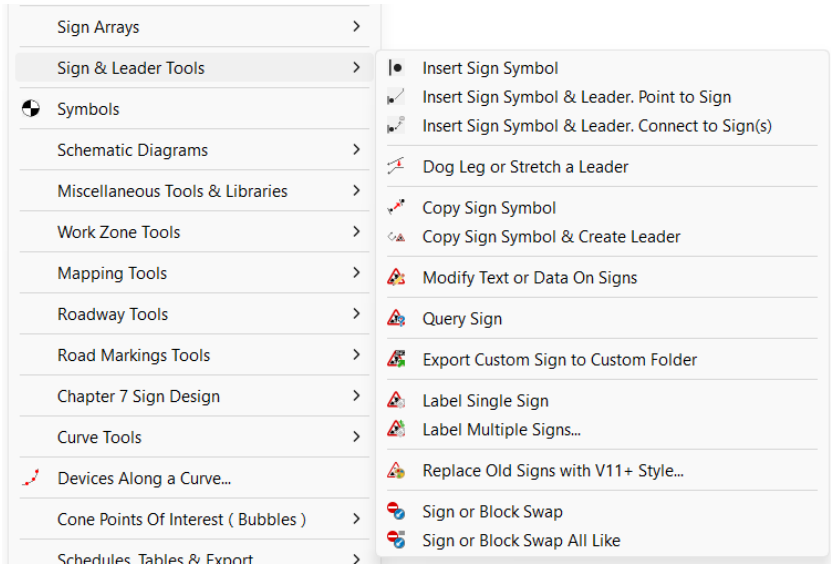


Click a labelling position option, or Cancel to return to the previous dialog

After selecting the labelling options, click the OK button to continue.

Select the signs to label, either individually, or by rectangular envelope box selection, then press the ENTER key to label the all the selected signs.

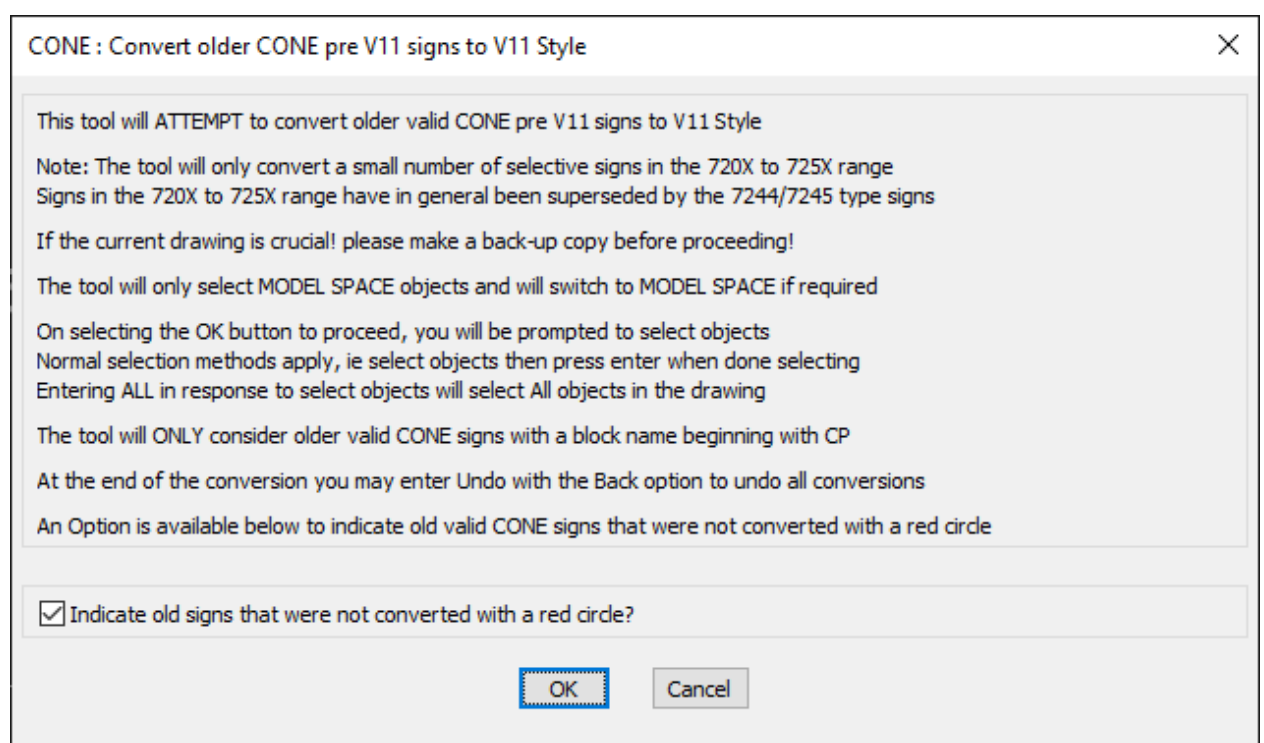
Sign & Leader Tools - Replace Old Signs with v11+ Style...

Command: CUKSLABEL RIBBON: CONE12 Main: SIGN AND LEADER TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR: CONE12_UK_Sign_Utilities	

RIBBON: CONE11 Part 1: Sign and Leader Tools

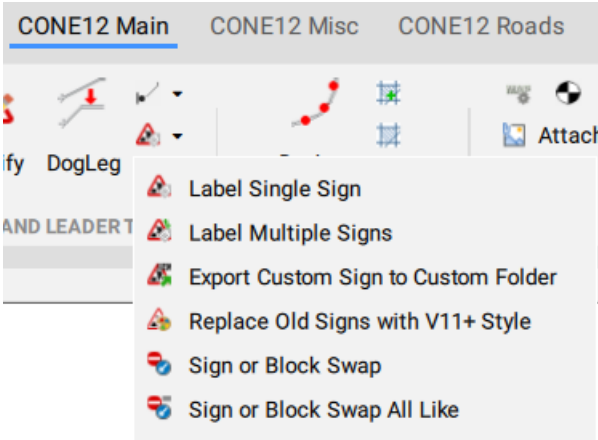
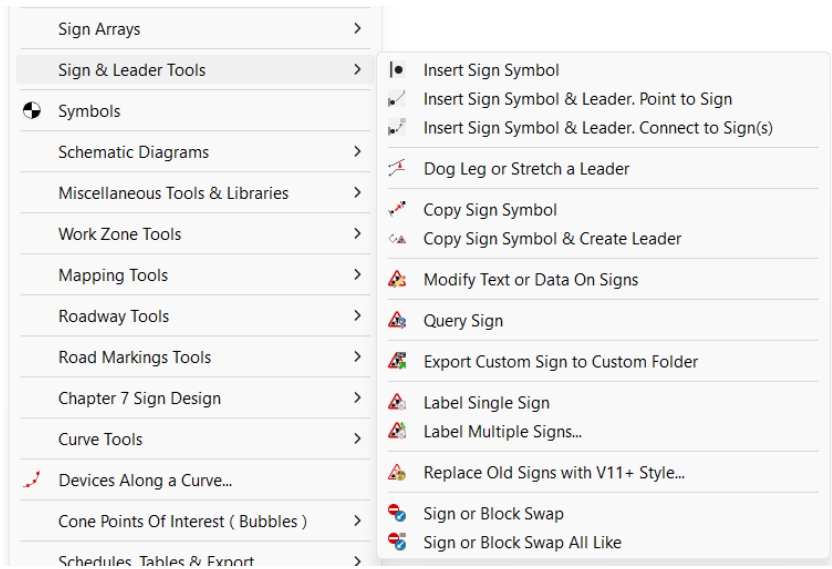
This function will remove CONE10 sign faces from the drawing and replace them with their equivalent CONE11 sign face blocks.

Whilst some of these look very similar, the old CONE10 sign face blocks will not be recognised by many routines, including the sign schedules tables.



Unrecognised signs will be highlighted after the routine has finished by having a red circle drawn around them unless the check box in the dialog above is unticked.

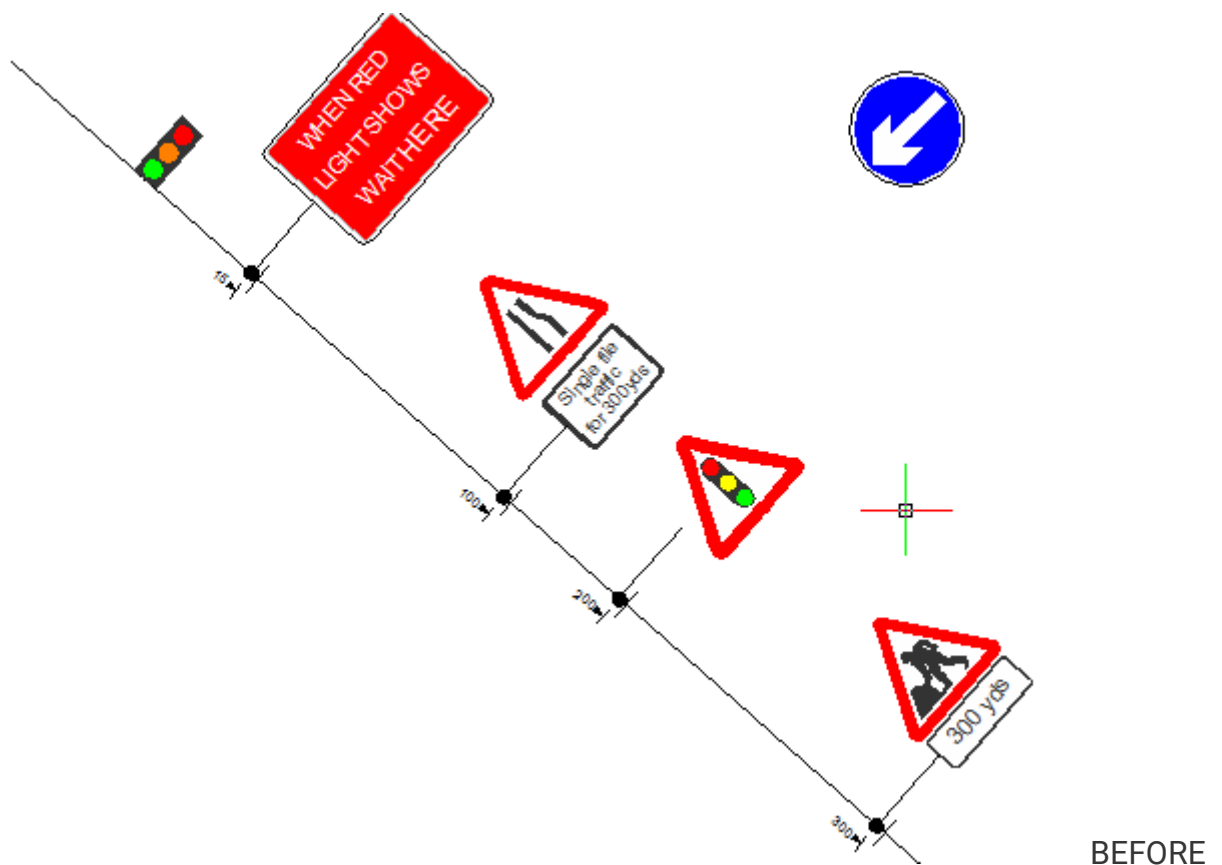
Sign & Leader Tools - Sign or Block Swap

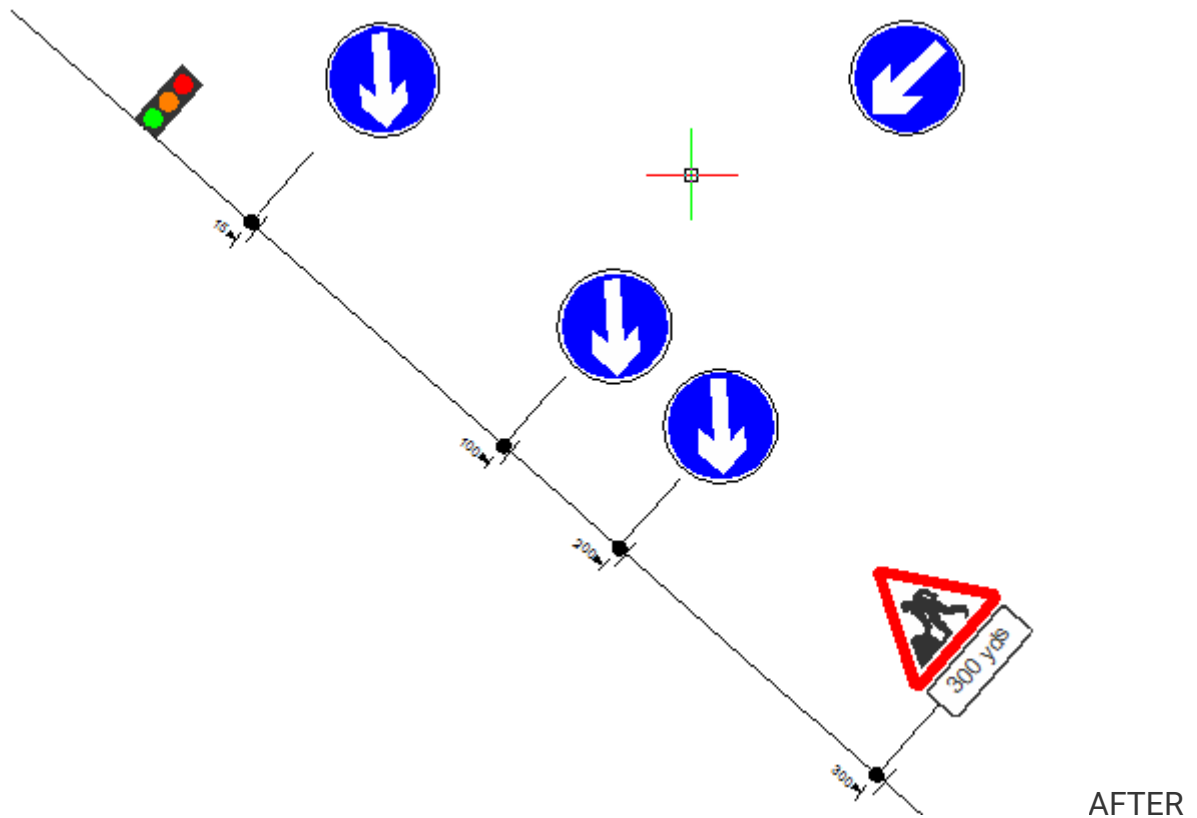
Command: CUKSLABEL RIBBON: CONE12 Main: SIGN AND LEADER TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR: CONE12_UK_Sign_Uilities	

RIBBON: CONE11 Part 1: Sign and Leader Tools

This function allows you to change a number of traffic signs to be the same as one already placed on the drawing.

In the example below, we change the traffic light & road narrows signs into keep left signs





After selecting the function from the menu, you will be prompted as follows:

Select replacement block: select the block to use to replace (the keep left sign)

Select blocks to be replaced: select one or more traffic signs to be replaced

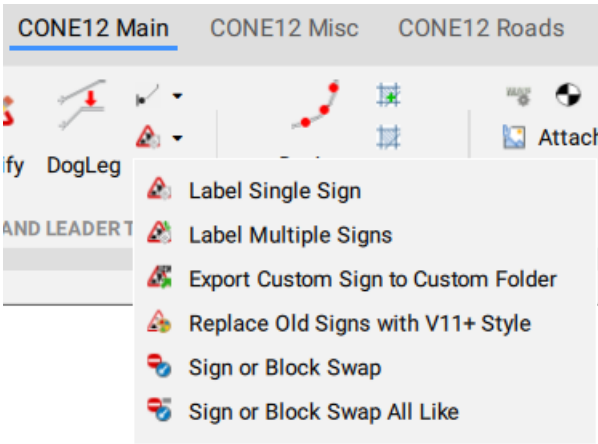
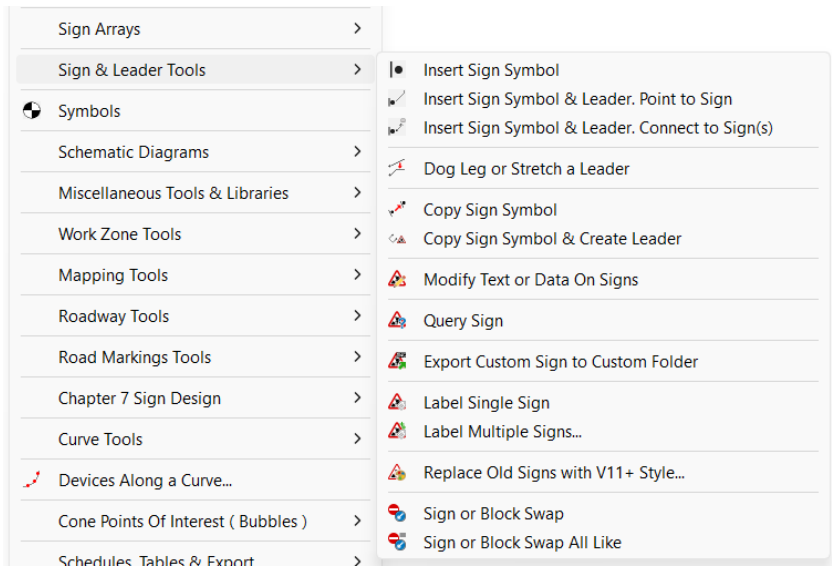
Select objects: 1 found

Select objects: 1 found, 2 total

Select objects: 1 found, 3 total

Select objects: press [ENTER] to replace selected signs with the initial traffic sign

Sign & Leader Tools - Sign or Block Swap All Like

Command: CUKSLABEL RIBBON: CONE12 Main: SIGN AND LEADER TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR: CONE12_UK_Sign_Utilities	

This function will swap all occurrences of a particular block on the drawing for one other block selected.

After selecting the function from the menu, you will be prompted as follows:

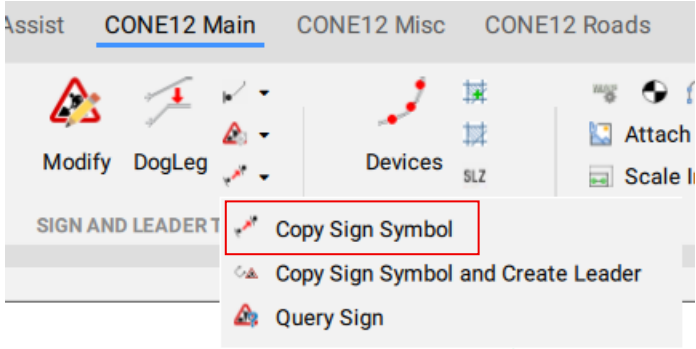
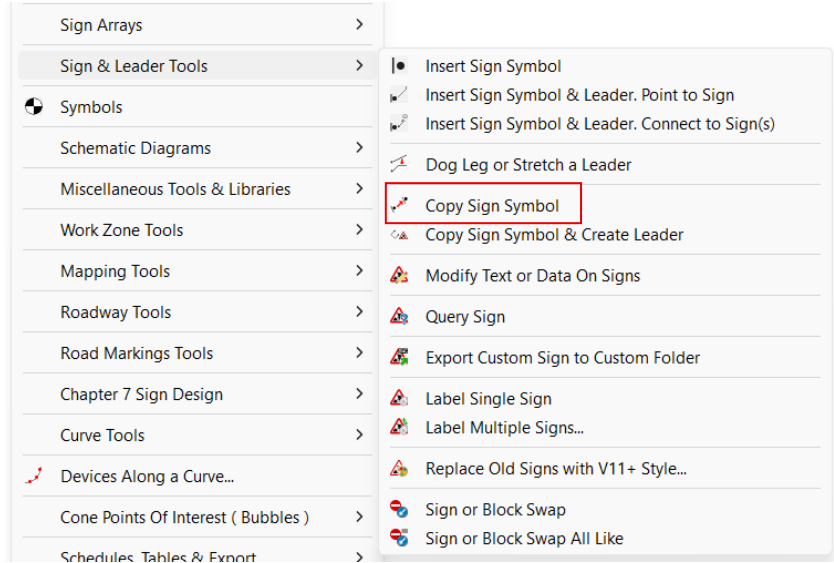
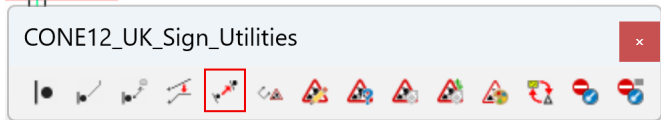
Select the replacement block: select the block to use to replace (if not already on the drawing, insert one temporarily – this one can be deleted later)

Now select one instance of all the LIKE blocks to be replaced:

Select entity: (select ONE instance of the block to be replaced)

After selecting the block type to be swapped, all occurrences of that block on the drawing will be replaced with the initial block selected.

Sign & Leader Tools - Copy Sign Symbol

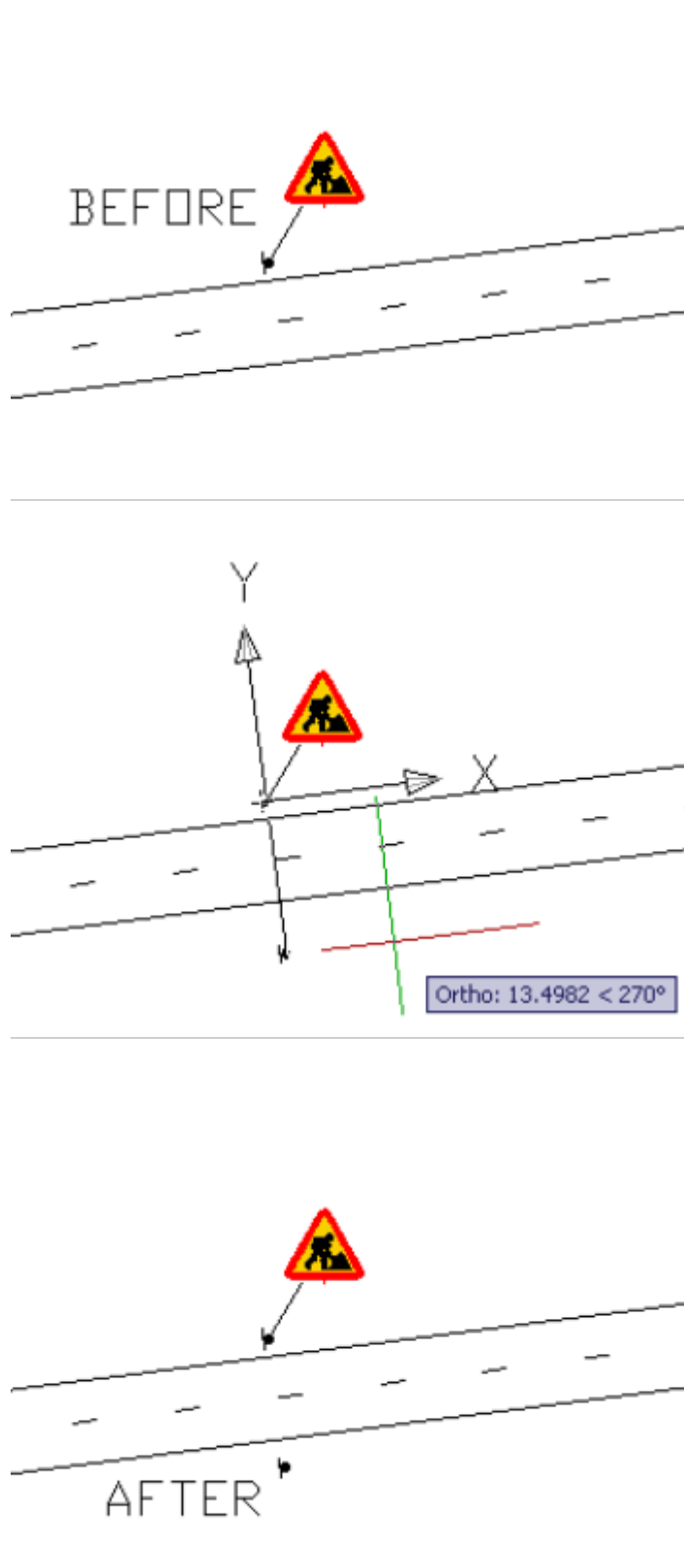
Command: CUKCSS RIBBON: CONE12 Main: SIGN AND LEADER TOOLS	 The screenshot shows the 'CONE12 Main' ribbon with the 'SIGN AND LEADER TOOLS' panel expanded. The 'Copy Sign Symbol' tool is highlighted with a red box. Other tools visible include 'Modify', 'DogLeg', 'Devices', 'SLZ', 'Attach', and 'Scale I'.
CONE12UKBC Pull Down Menu	 The screenshot shows the 'CONE12UKBC Pull Down Menu' with the 'Sign & Leader Tools' option selected. The 'Copy Sign Symbol' option is highlighted with a red box. Other options include 'Sign Arrays', 'Symbols', 'Schematic Diagrams', 'Miscellaneous Tools & Libraries', 'Work Zone Tools', 'Mapping Tools', 'Roadway Tools', 'Road Markings Tools', 'Chapter 7 Sign Design', 'Curve Tools', 'Devices Along a Curve...', 'Cone Points Of Interest (Bubbles)', and 'Schedules, Tables & Export'.
TOOLBAR: CONE12_UK_Sign_Utilities	 The screenshot shows the 'CONE12_UK_Sign_Utilities' toolbar with the 'Copy Sign Symbol' tool highlighted by a red box. The toolbar contains various icons for sign and leader tools.

Sign Symbols show the position on the drawing where the sign is to be located.

Use this tool when the same sign is to be placed on BOTH sides of the carriageway

Using this function it is possible to copy the sign symbol on the drawing.

Example



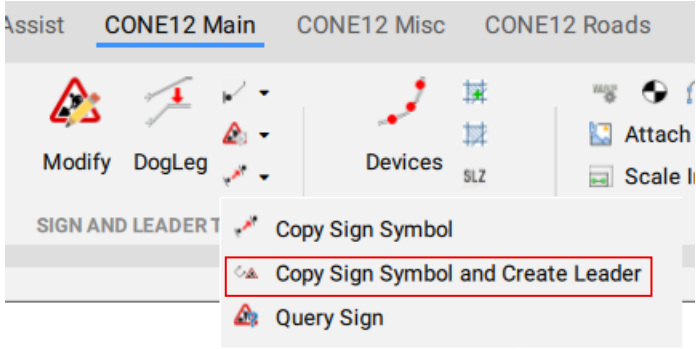
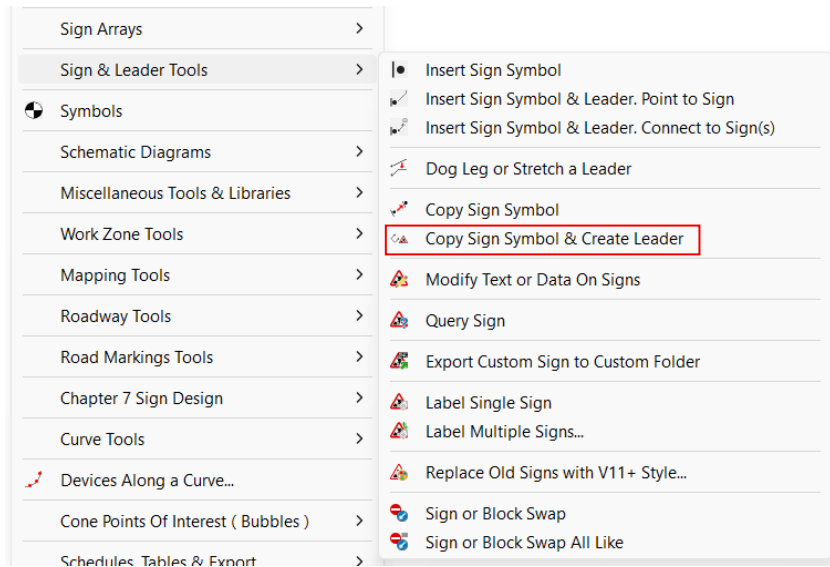
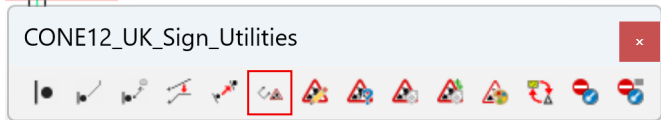
After selecting the function from the menu, you will be prompted as follows:

Select a Sign Symbol to copy pick the sign symbol adjacent to the kerb

Pick new insert point drag mouse to opposite side of carriageway & left click

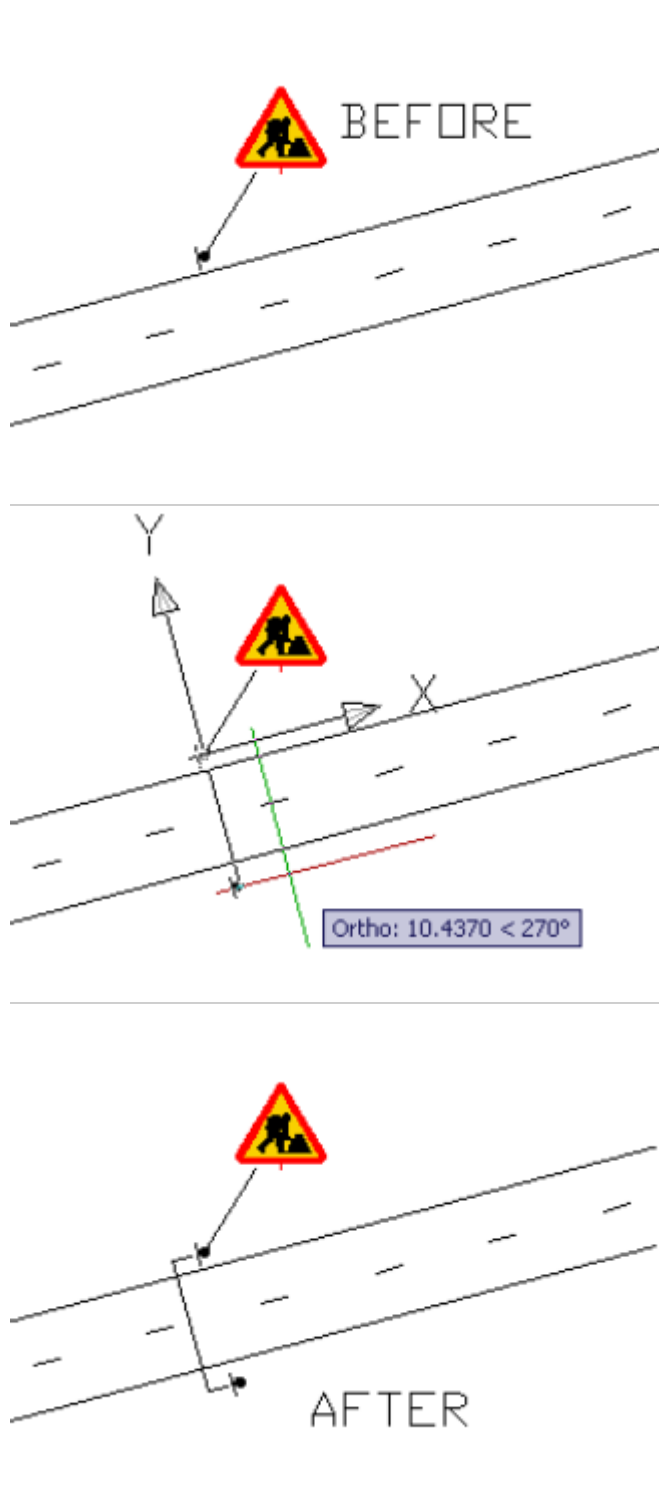
NOTE: in the centre diagram above, you can see once the sign symbol is selected, dragging it's copy is temporarily locked to parallel to the sign symbols rotation as shown by the XY axes marker.

Sign & Leader Tools - Copy Sign Symbol & Create Leader

Command: CUKCSSL RIBBON: CONE12 Main: SIGN AND LEADER TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR: CONE12_UK_Sign_Utilities	

As with the previous function, signs copied to the opposite side of the carriageway may be isolated from the original.

Using this function draws a leader-line linking the two.



After selecting the function from the menu, you will be prompted as follows:

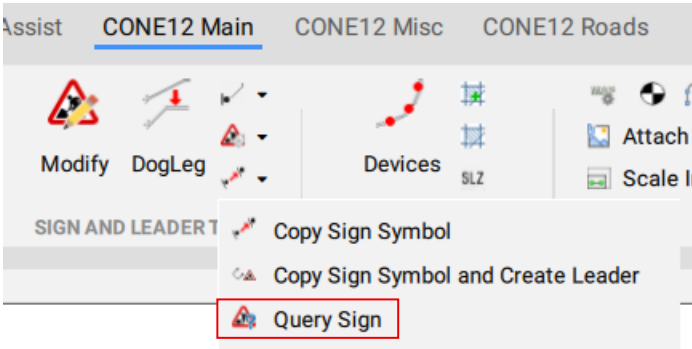
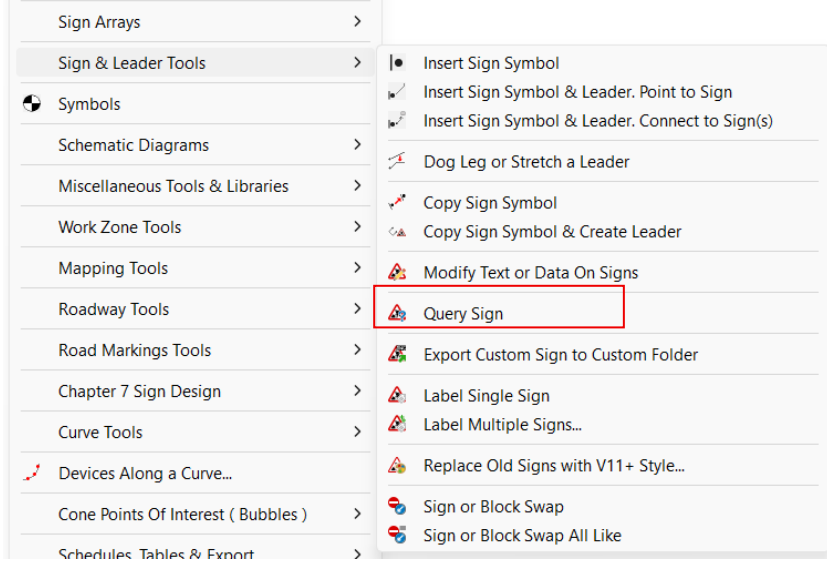
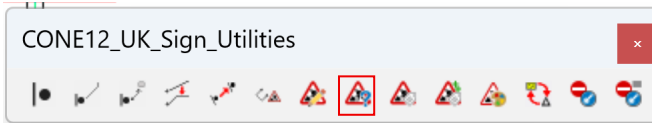
Select a Sign Symbol to copy pick the sign symbol adjacent to the kerb

Pick new insert point drag mouse to opposite side of carriageway & left click

After the new sign symbol position is selected, the sign is drawn, and the leader lines drawn across the carriageway.

NOTE: in the centre diagram above, you can see once the sign symbol is selected, dragging its copy is temporarily locked to parallel to the sign symbols rotation as shown by the XY axes marker.

Sign & Leader Tools - Query Sign

Command: CUKQUERYSIGN RIBBON: CONE12 Main: SIGN AND LEADER TOOLS	 The screenshot shows the 'CONE12 Main' ribbon with the 'SIGN AND LEADER TOOLS' panel active. The 'Query Sign' tool, represented by a sign icon, is highlighted with a red box. Other tools visible include 'Modify', 'DogLeg', 'Devices', 'SLZ', 'Attach', and 'Scale I'.
CONE12UKBC Pull Down Menu	 The screenshot shows the 'CONE12UKBC Pull Down Menu' with the 'Sign & Leader Tools' option selected. The 'Query Sign' option, represented by a sign icon, is highlighted with a red box. Other options include 'Sign Arrays', 'Symbols', 'Schematic Diagrams', 'Miscellaneous Tools & Libraries', 'Work Zone Tools', 'Mapping Tools', 'Roadway Tools', 'Road Markings Tools', 'Chapter 7 Sign Design', 'Curve Tools', 'Devices Along a Curve...', 'Cone Points Of Interest (Bubbles)', and 'Schedules Tables & Export'.
TOOLBAR: CONE12_UK_Sign_Utilities	 The screenshot shows the 'CONE12_UK_Sign_Utilities' toolbar with the 'Query Sign' tool, represented by a sign icon, highlighted with a red box. Other tools visible include 'Insert Sign Symbol', 'Insert Sign Symbol & Leader. Point to Sign', 'Insert Sign Symbol & Leader. Connect to Sign(s)', 'Dog Leg or Stretch a Leader', 'Copy Sign Symbol', 'Copy Sign Symbol & Create Leader', 'Modify Text or Data On Signs', 'Export Custom Sign to Custom Folder', 'Label Single Sign', 'Label Multiple Signs...', 'Replace Old Signs with V11+ Style...', 'Sign or Block Swap', and 'Sign or Block Swap All Like'.

This function allows you to query a sign and change the qty of signs to be used at a location, or modify the user-defined attributes attached to a sign.

After selecting a sign to edit, the following dialog will be displayed, showing basic information on the sign face selected, as well as editable boxes for the sign User Attribute data and most importantly the quantity, this is the number of signs at this location, this can be specified whilst only showing one actual sign face on the drawing.

press the OK button after making changes to update the drawing file

You can also add a Sign Info Table

Amend any values as desired and pick the Insert Sign Info button

CONE : Query CONE 11+ Sign

Summary

CONE Version 11
Ref: 7243
Temporary lane availability
Size: 3492 x 2475 @ 300 Arrow / 150 X-Hgt
Background Colour: yellow

Sign Info Table (Amend values if applicable)

Pick the [Insert Sign Info Table] button to add to the drawing

Title

Temporary lane availability

Ref

7243

x-Hgt

150

Colour

Yellow

Width

2328

Material

BS EN 12899 - Class R2

Height

1650

Remarks

Table Scale

1

You can modify the User Attribute Data here if required

Item

User Size

User 1

User 2

Quantity

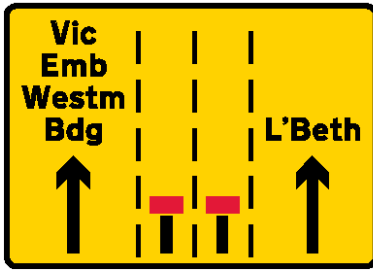
3

Insert Sign Info Table

OK

Cancel

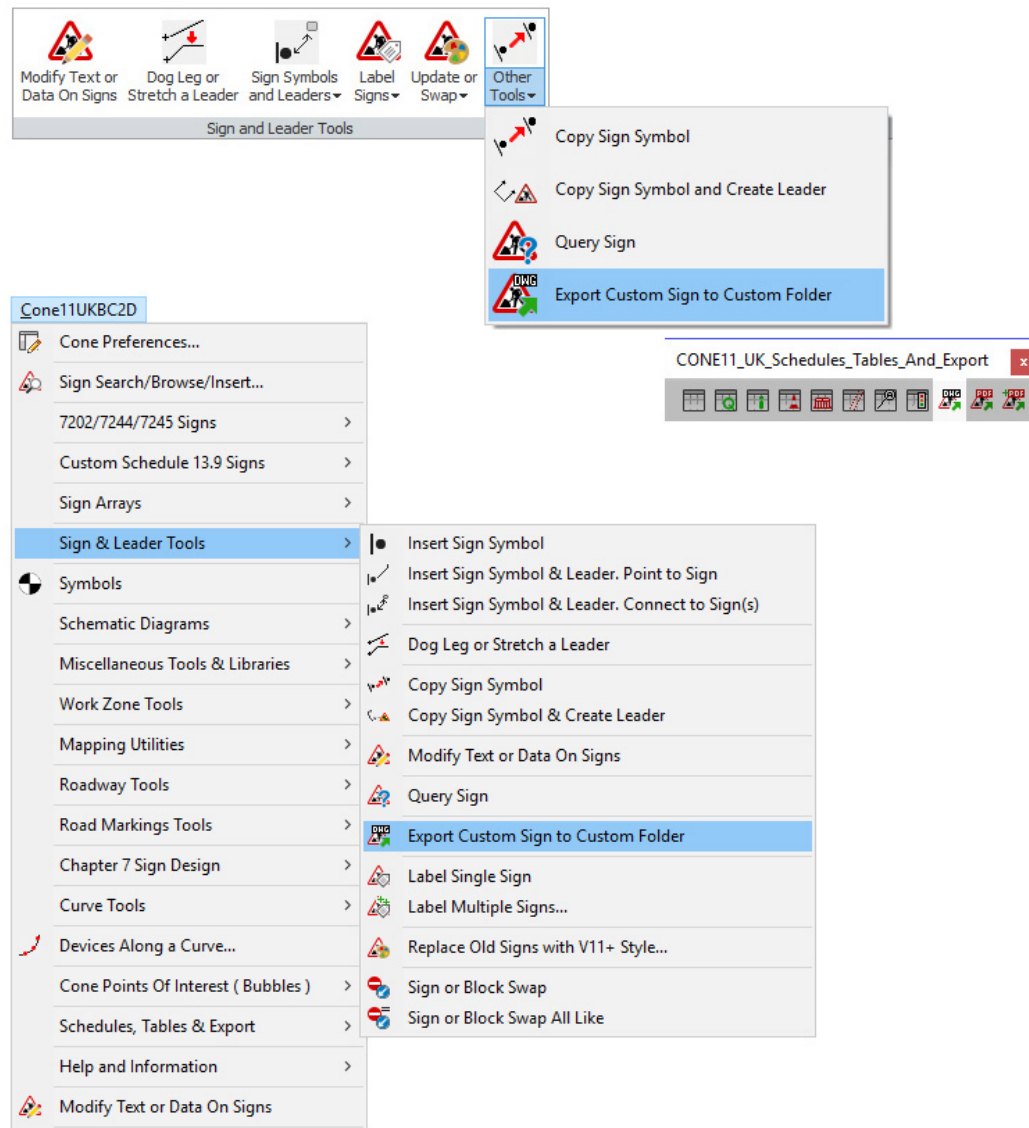
Example



Title: Temporary lane availability		
Sign Ref: 7243	x - Hgt:	50
Colour: Yellow	Width:	1050
Material: BS EN 12899 - Class R2	Height:	744
Qty: 3	Area:	0.781 SqM
Remarks:		

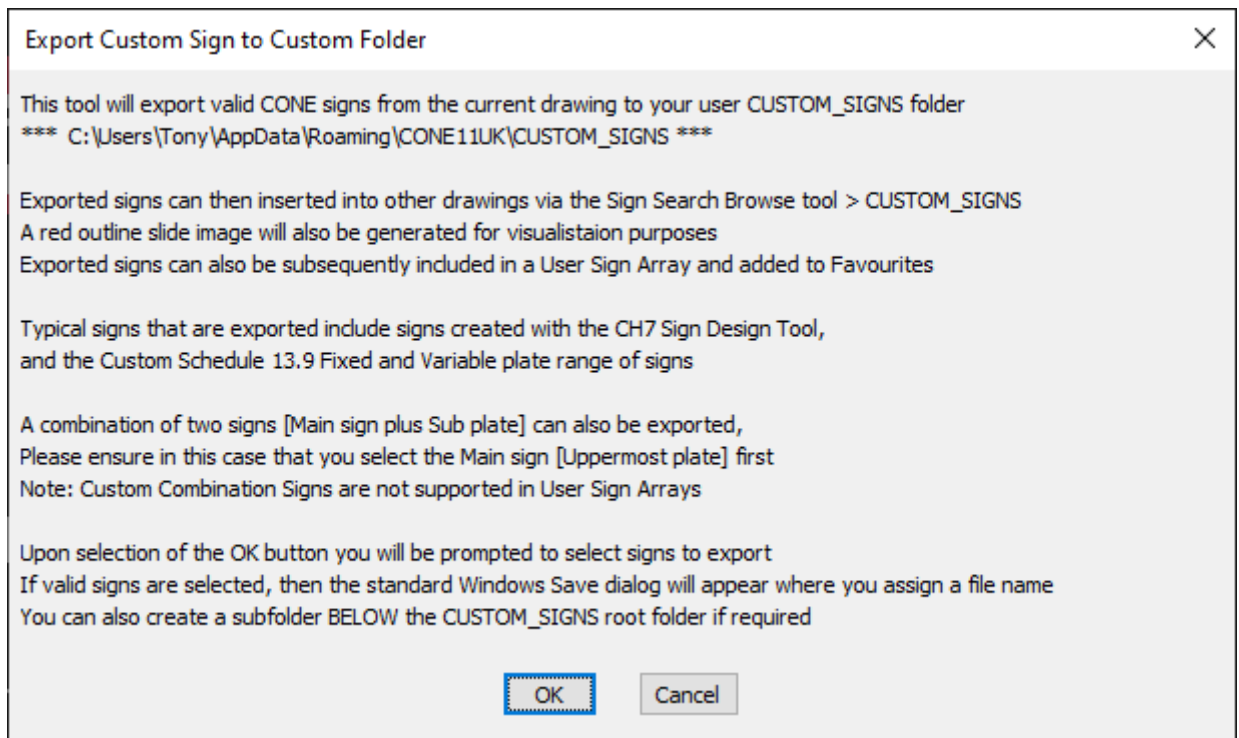
Sign & Leader Tools - Export Custom Sign to Custom Folder

RIBBON: CONE11 Part 1: Sign and Leader Tools

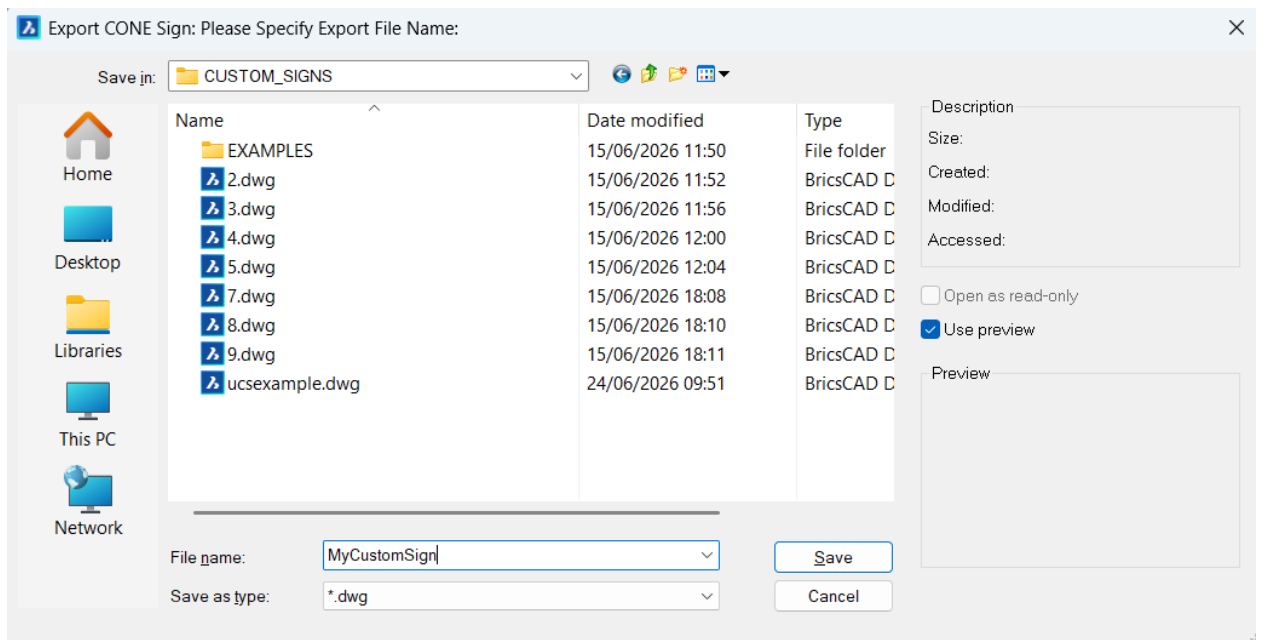


This function will save a custom designed sign from this drawing into a folder to be later re-used.

On selecting the function, the following information dialog will be displayed:

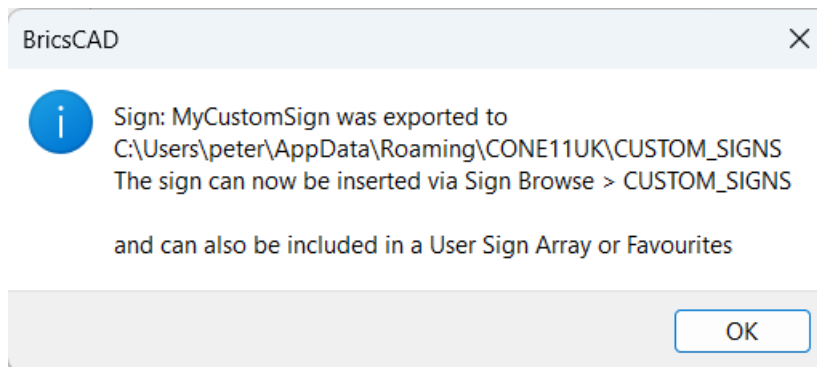


After selecting a sign to export, and pressing ENTER, the program will prompt you for a filename for the sign

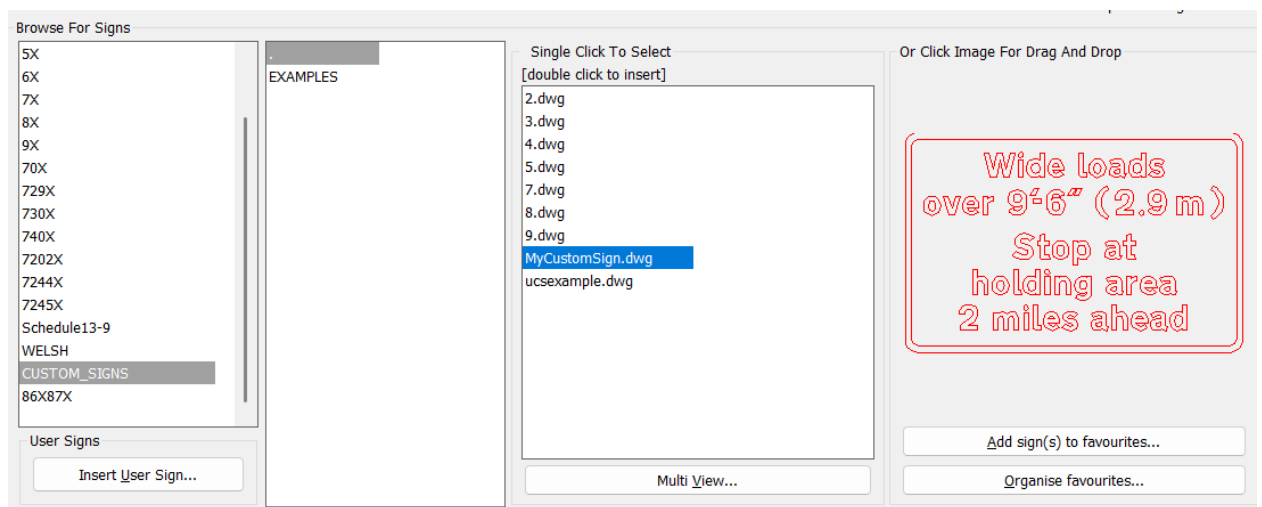


Enter a File name and pick the Save button

After saving the file the following confirmation dialog will be displayed.

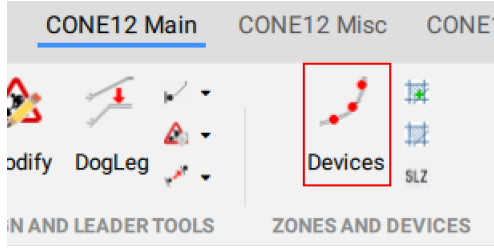
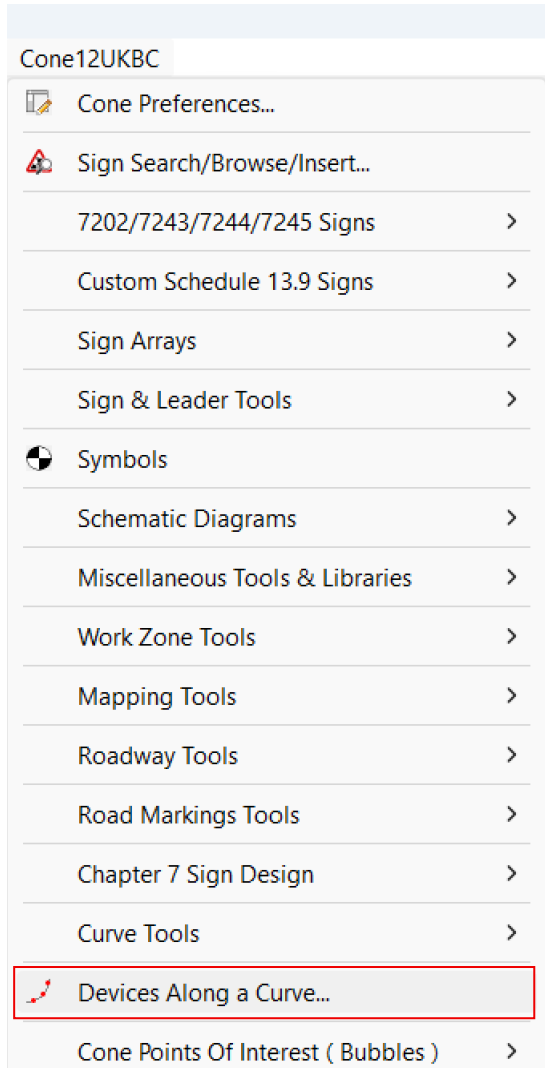
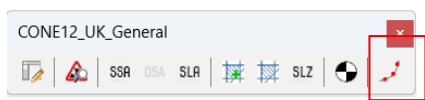


As noted above, you can re-use this sign from the Sign Search/Browse/Insert dialog or add it to a custom sign array



Note the red outline of the slide of the sign in the signs image box is due to a limitation of the method of creating and displaying slides in a dialog

Devices Along a Curve

Command: CUKDEVICES RIBBON: CONE12 Main: ZONES AND DEVICES	 The screenshot shows the 'CONE12 Main' ribbon tab. Under the 'ZONES AND DEVICES' group, the 'Devices' button, which features a red line with three dots, is highlighted with a red rectangular box.
CONE12UKBC Pull Down Menu	 The screenshot shows the 'Cone12UKBC' pull-down menu. The menu items include 'Cone Preferences...', 'Sign Search/Browse/Insert...', '7202/7243/7244/7245 Signs', 'Custom Schedule 13.9 Signs', 'Sign Arrays', 'Sign & Leader Tools', 'Symbols', 'Schematic Diagrams', 'Miscellaneous Tools & Libraries', 'Work Zone Tools', 'Mapping Tools', 'Roadway Tools', 'Road Markings Tools', 'Chapter 7 Sign Design', 'Curve Tools', 'Devices Along a Curve...', and 'Cone Points Of Interest (Bubbles)'. The 'Devices Along a Curve...' option, which has a red line with three dots icon, is highlighted with a red rectangular box.
CONE12_UK_General Toolbar	 The screenshot shows the 'CONE12_UK_General' toolbar. It contains various icons for different tools. The icon representing 'Devices Along a Curve' (a red line with three dots) is highlighted with a red rectangular box.

This tool enables you to place channelling devices and direction arrows (symbols) along pre-drawn curves (Arcs, Lines and Polylines)

You may place the devices between 2 points on the curve or specify that the devices fully fit on the chosen curve. You can also choose to place the devices between 2 points on the drawing.

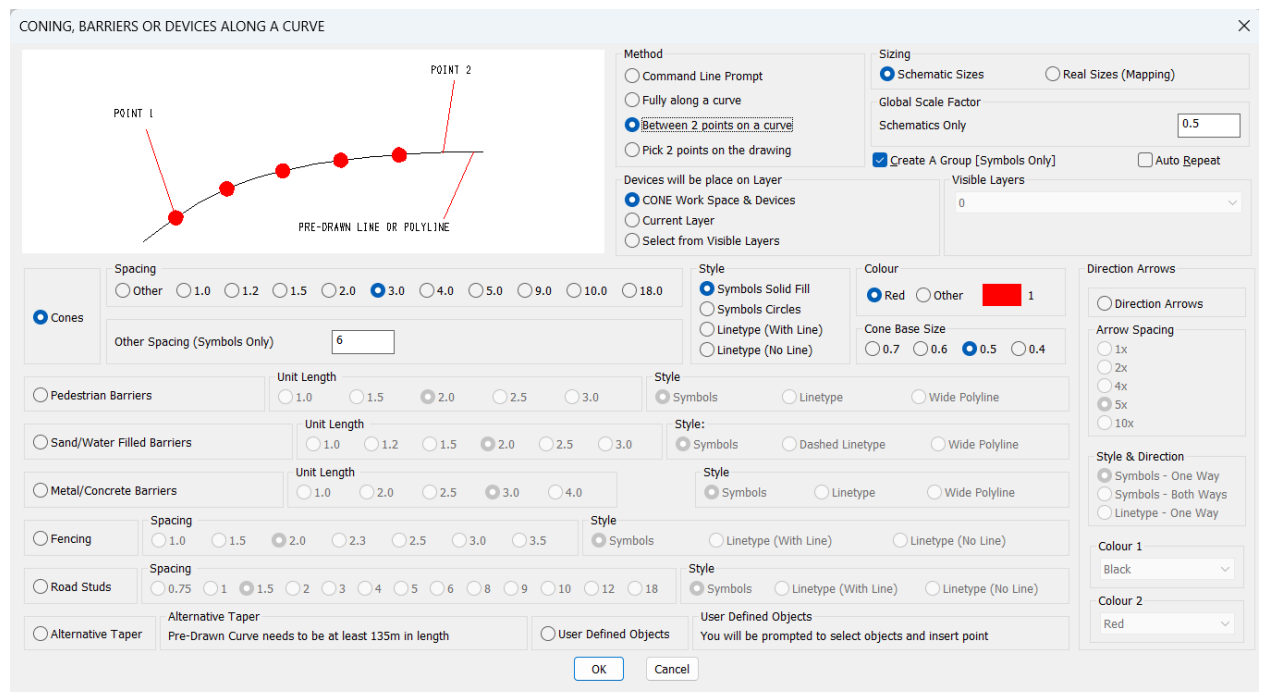
Each type of devices has a number of “Size” and Style options:

For Cones , Fencing and Studs: specify the spacing between cones and choose between Symbols or Linetypes

For Barriers: specify the Unit Length and choose between Symbols or Linetypes

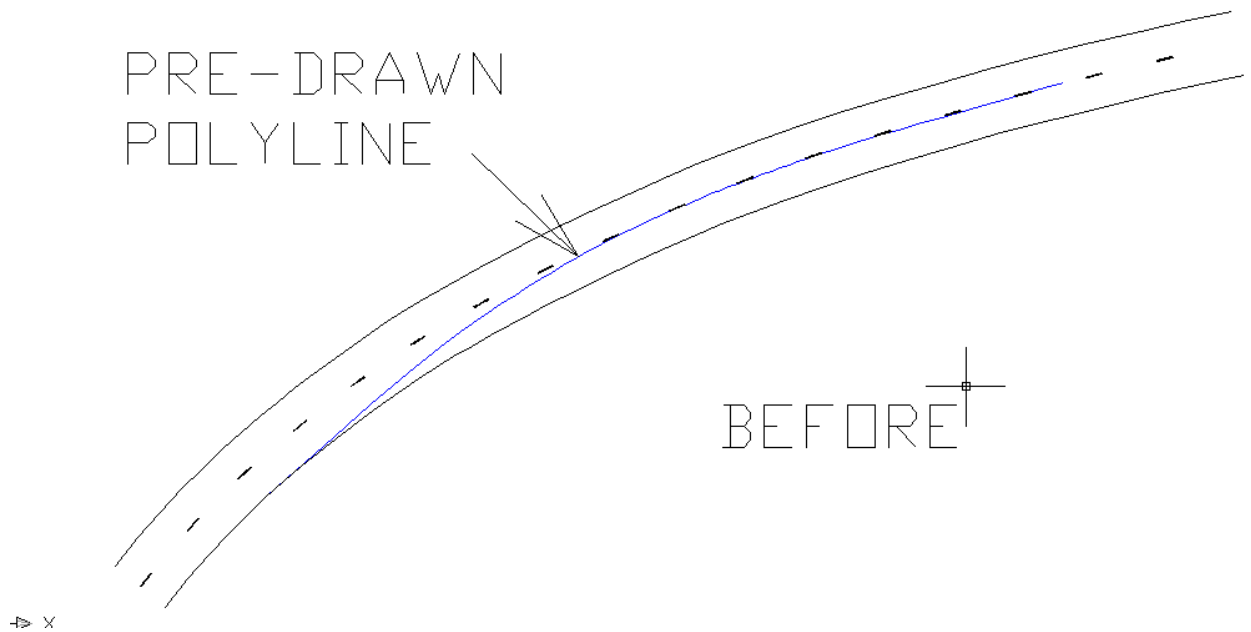
For Arrows the spacing is determined by a factor of the arrow size and the style can be Symbols or Linetypes

Barriers can also be created with wide polylines



Example 1: Sand and Water Filled Barriers 2.metres long, Symbol Style as per dialog above using Real sizes as opposed to Schematic sizes

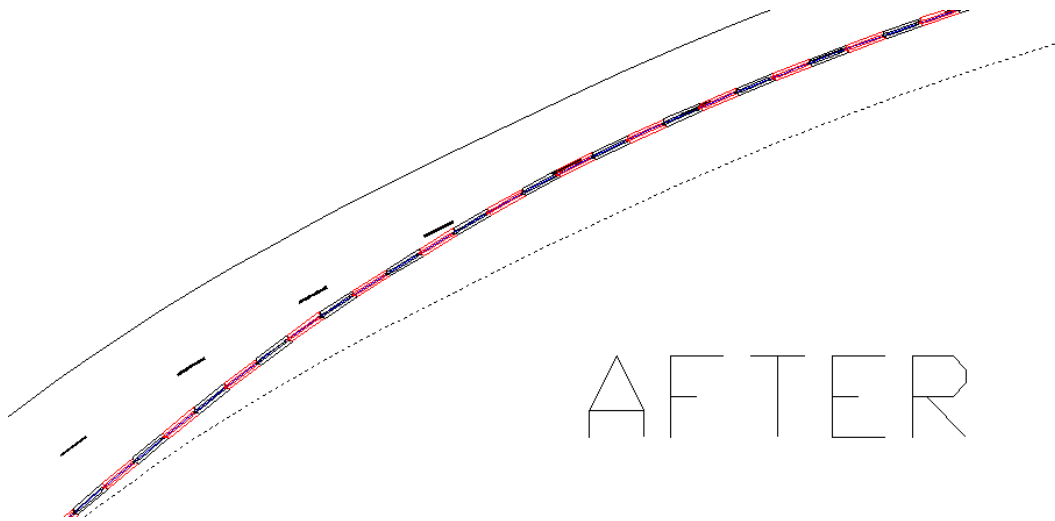
Select the OK button



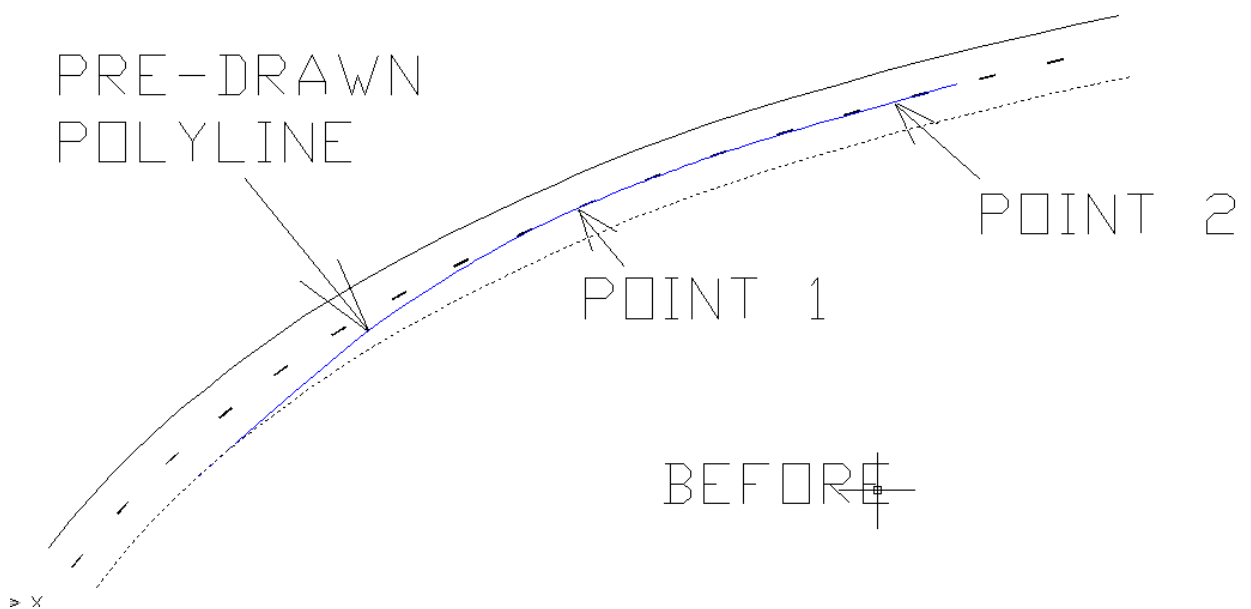
CAD system prompts below:

Command: Select Object Curve (Line, Polyline ,Arc or Circle) *Select a pre-drawn object curve*

Command: Pick First Point or key <F>ull use the full length: F *Enter F*



Example 2: Cones 2.0 metres long, Symbol style between 2 points on a polyline curve

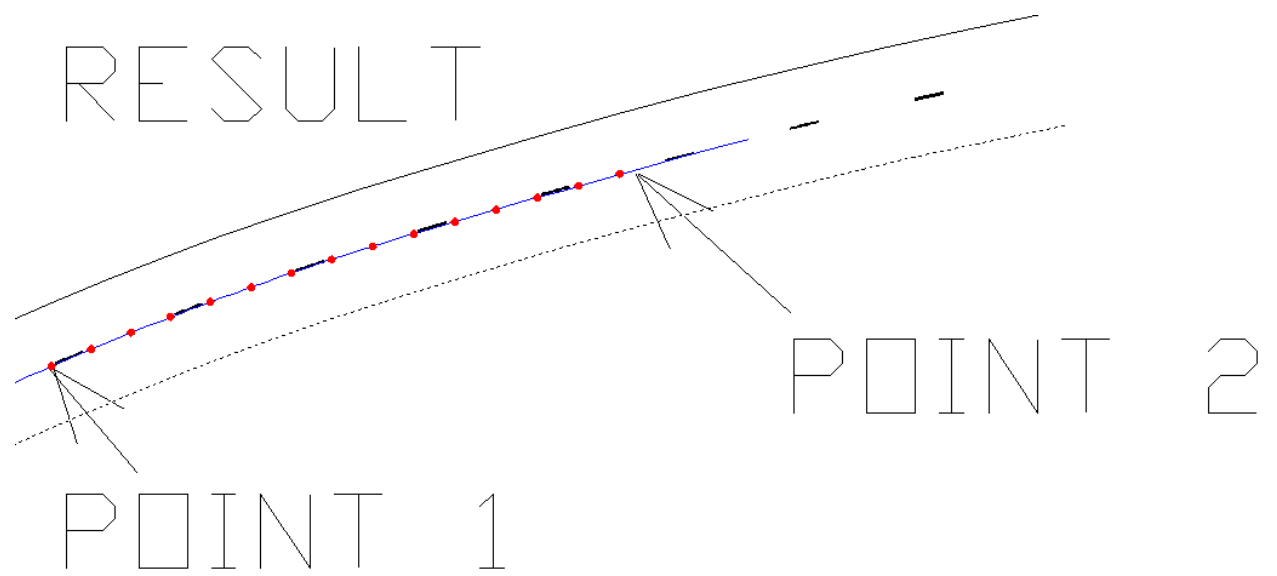


CAD system prompts below:

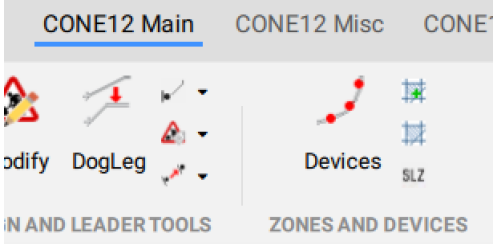
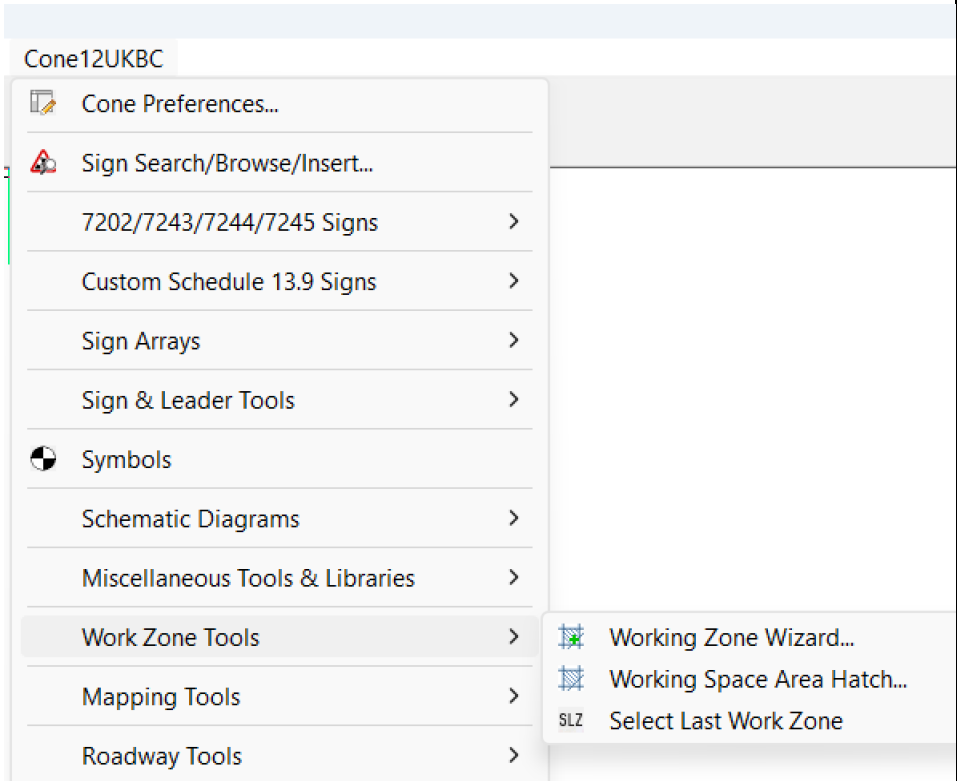
Command: Select Object Curve (Line, Polyline ,Arc or Circle) : *Select a pre-drawn object curve*

Command: Pick First Point or key <F>ull to cone use the full length: *Pick point 1*

Command: Pick Second Point: *Pick point 2*



Work Zone Tools – Working Zone Wizard

Command: CUKWORKZONE RIBBON: CONE12 Main: ZONES AND DEVICES	
CONE12UKBC Pull Down Menu	
CONE12_UK_Gener al Toolbar	

The Working Zone Wizard tool allow you to quickly specify and shade working zones, add barriers, cones and even signs at both start and end of works in just a few clicks.

CONE Works Zone Wizard

Works Type

☒ Works On Nearside - Offset From Nearside

☐ Works On Nearside - Offset From Farside

☐ Works in Centre : 1

☐ Works in Centre : 2

Start & End Reference Points

☒ Lead-In Taper Start Pt to Exit Taper End Pt

☐ Working Space Start Pt to Working Space End Pt

Create Objects on Layers?

☐ Current Layer

☒ CONEWORKSPACEANDDEVICES

WORKS ON NEARSIDE - OFFSET NEARSIDE

NEARSIDE CONTINUOUS CURVE
SELECT FIRST 2 POINTS ALONG CURVE METHOD

LEAD-IN TAPER (START POINT) POINT 1

EXIT TAPER (END POINT) POINT 2

POINT 3

OFFSET HAZARD WIDTH

S1

L1 MIN WORKSPACE LENGTH L2

SAFETY ZONE HATCH (OPTIONAL)

WORKING SPACE HATCH (OPTIONAL)

BARRIERS (OPTIONAL)

DIRECTION SIGNAGE AT LEAD-IN TAPER

DIRECTION SIGNAGE AT EXIT TAPER

OPTION A

OPTION B

OPTION C

OPTION 1

OPTION 2

CHOOSE METHOD TO CONTINUE >>

Between 2 points along a Curve

LEAD-IN TAPER & CONING

Taper Rate
☒ 45Deg ☐ 1:13 ☐ 1:20 ☐ 1:25 ☐ By Length

Taper Length
25

Lead-In Taper Cone Spacing
☐ 1.0 ☒ 1.2 ☐ 1.5 ☐ 3.0 ☐ 9.0

EXIT TAPER & CONING

Taper Rate
☒ 45Deg ☐ 1:13 ☐ 1:20 ☐ 1:25 ☐ None ☐ By Length

Taper Length
25

Exit Taper Cone Spacing
☐ 1.0 ☒ 1.2 ☐ 1.5 ☐ 3.0 ☐ 9.0

CONING TYPE

☒ Symbols (Solid)

☐ Symbols (Circles)

☐ Linetype (With Line)

☐ Linetype (No Line)

☐ Wide Polyline

☐ None

Cone Base Size
☐ 0.7 ☐ 0.6 ☒ 0.5 ☐ 0.4

Coning Line Colour
☒ Match Hatch Colour? (Symbol types only)

LONGITUDINAL CONING

Cone Spacing
☐ 1.0 ☐ 1.2 ☐ 1.5 ☐ 3.0 ☐ 4.0 ☒ 9.0 ☐ 18.0

Also On Nearside?
☐ Yes ☒ No

OPTIONAL SAFETY ZONE HATCH

☒ Hatch?

Colour
1

Transparency
60

Hatch Type
☒ Angled ☐ Solid

Hatch Spacing
1.5

☐ Double?

OPTIONAL WORKING SPACE - Positive Values Only - Except S2 may be negative

☒ Create?

L1 0.5 S1 0.5 MIN WSpace Length 1.0

L2 0.5 S2 0.5

Barriers?
☐ None ☐ Blocks ☐ Linetype ☒ Wide Poly

OPTIONAL WORKING SPACE HATCH?

☒ Hatch?

Colour
5

Transparency
60

Hatch Type
☒ Angled ☐ Solid

Hatch Spacing
0.8

☐ Double?

OPTIONAL DIRECTION SIGNAGE

At Lead-In Taper?
☐ None ☒ Opt A ☐ Opt B ☐ Opt C

At Exit Taper?
☐ None ☒ Opt 1 ☐ Opt 2

Alignment
☒ Align ☐ Zero

Sign Scale
0.5

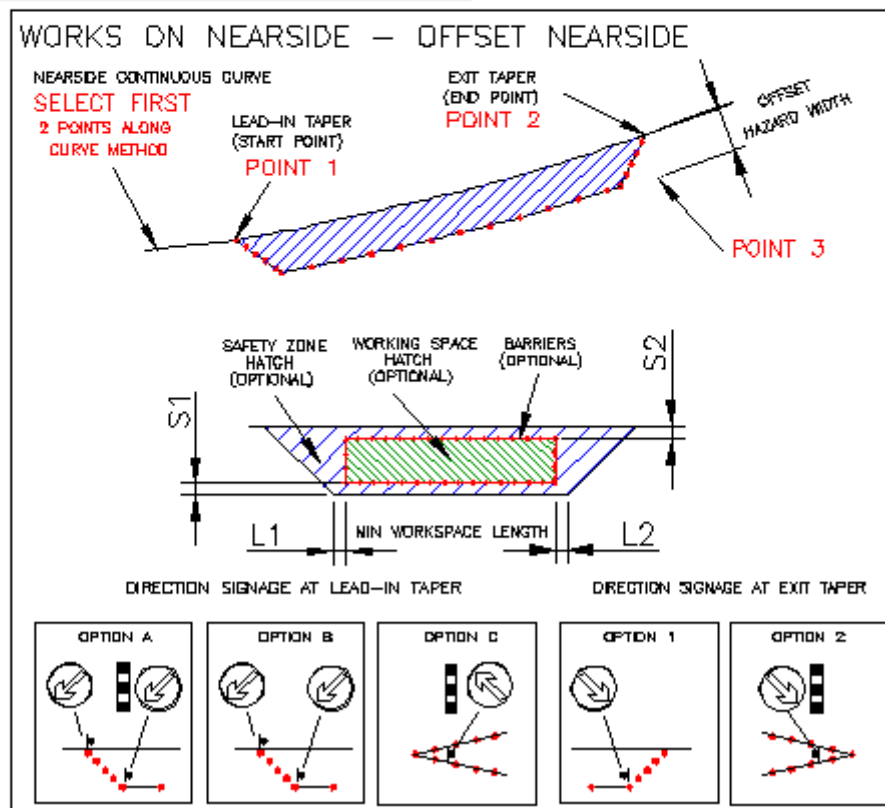
In a Straight Line (Two point pick) Cancel Save Or Select Favourites...

Works Type

Works On Nearside – Offset From Nearside

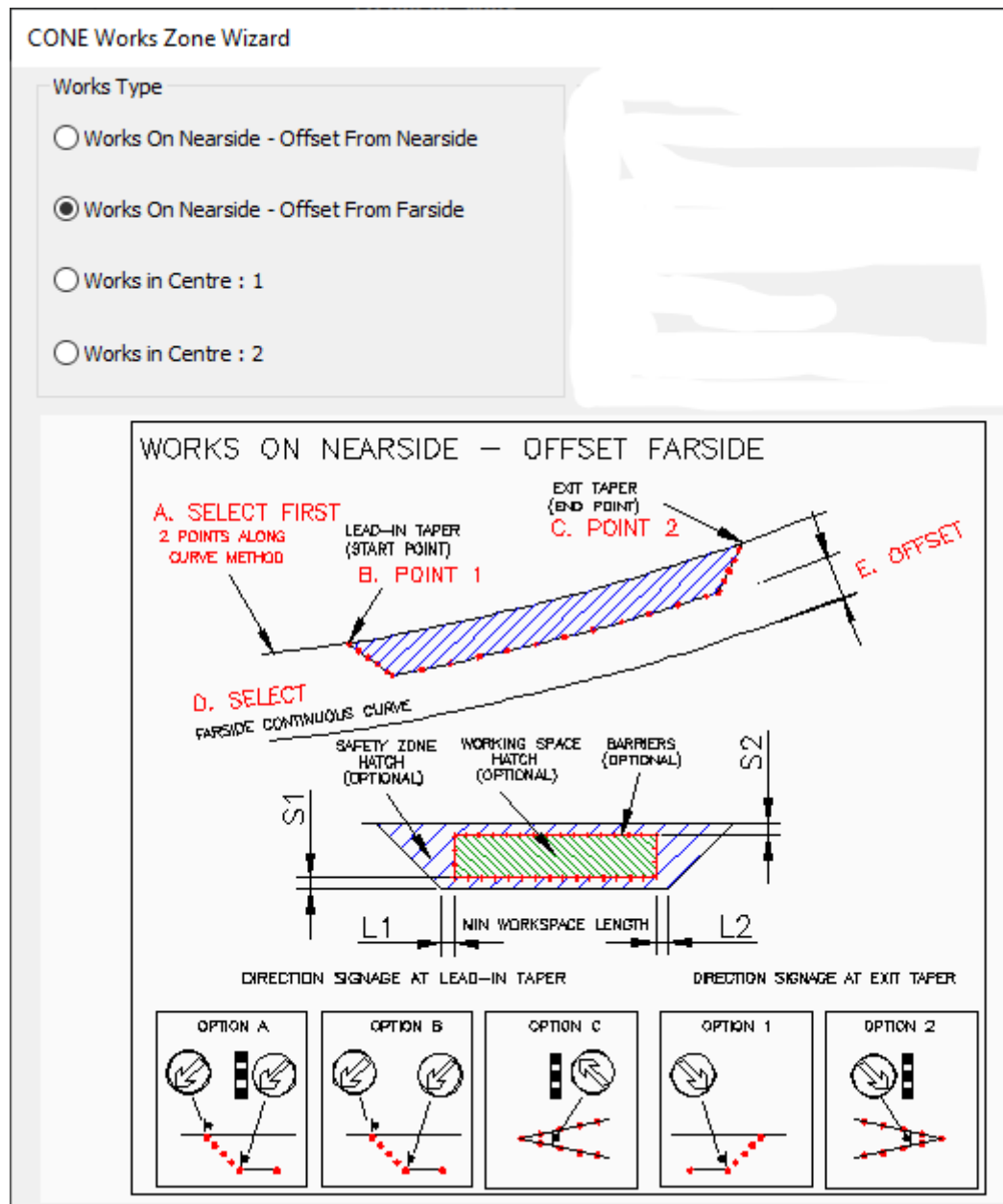
Works Type

- ☒ Works On Nearside - Offset From Nearside
- ☐ Works On Nearside - Offset From Farside
- ☐ Works in Centre : 1
- ☐ Works in Centre : 2



The working zone is specified relative to the nearside kerb, along with width and length. Hatching, cones and safety zones are specified in the dialog box section to the right, these are explained later in this section.

Works On Nearside – Offset From Farside



The working zone is specified by starting and ending points along the nearside kerb, the width is specified relative to the offside kerb. Hatching, cones and safety zones are specified in the dialog box section to the right, these are explained later in this section.

Works in Centre : 1

CONE Works Zone Wizard

Works Type

☐ Works On Nearside - Offset From Nearside

☐ Works On Nearside - Offset From Farside

☒ Works in Centre : 1

☐ Works in Centre : 2

WORKS CENTRE : TYPE 1

CONTINUOUS CURVE
SELECT FIRST
IF CURVE ALIGNMENT
METHOD

LEAD-IN TAPER
(START POINT)
POINT 1

EXIT TAPER
(END POINT)
POINT 2

POINT 3

HALF OF
HAZARD
WIDTH

SAFETY ZONE
HATCH
(OPTIONAL)

WORKING SPACE
HATCH
(OPTIONAL)

BARRIERS
(OPTIONAL)

S1

S2

L1

MIN WORKSPACE LENGTH

L2

DIRECTION SIGNAGE AT BOTH TAPERS

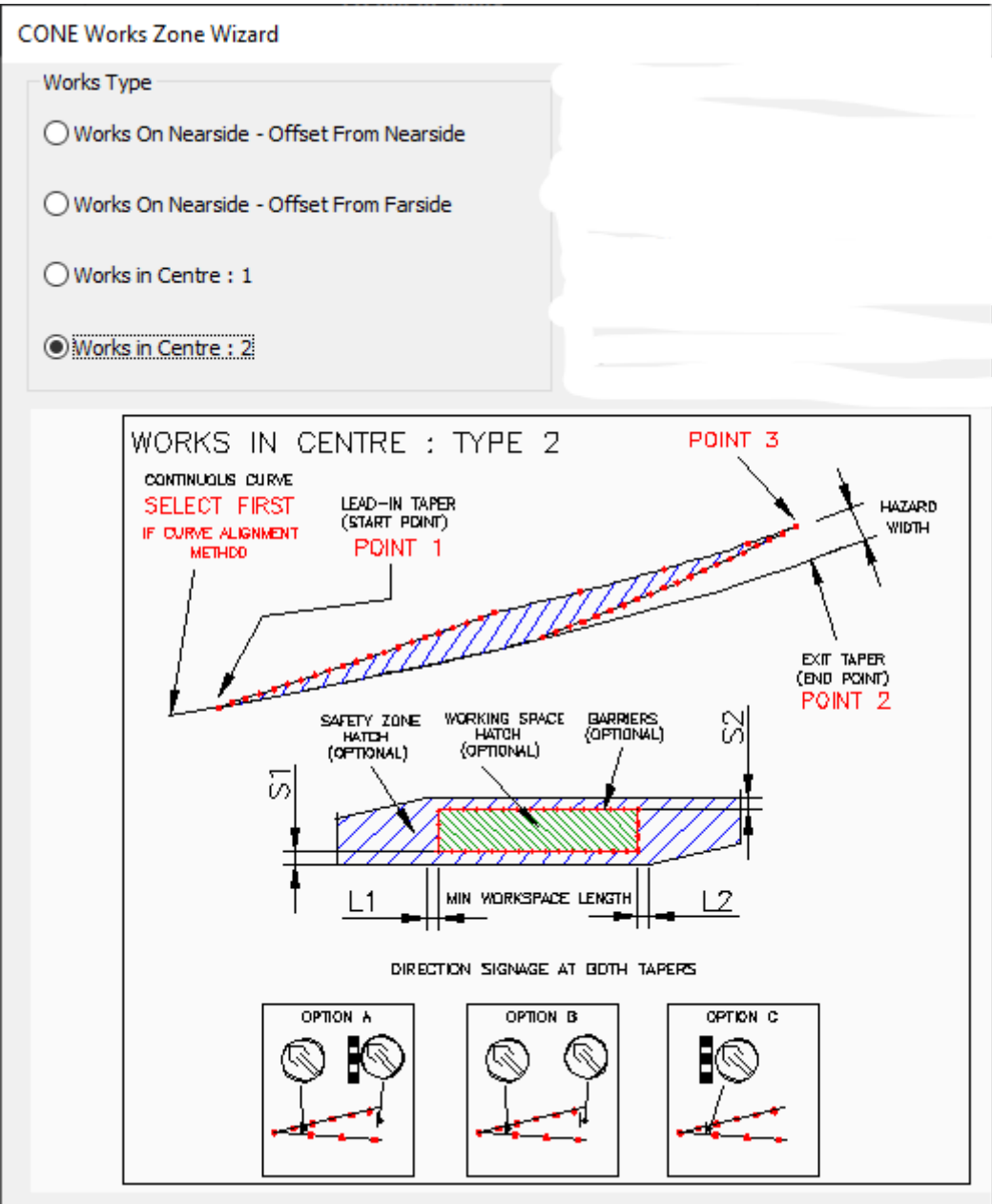
OPTION A

OPTION B

OPTION C

The working zone is specified relative to the centreline of the road, or another polyline you have drawn, along with width and length. Hatching, cones and tapers are specified in the dialog box section to the right, these are explained later in this section.

Works in Centre : 2



The working zone is specified relative to the centreline of the road, or another polyline you have drawn, along with width and length. Hatching, cones and tapers are specified in the dialog box section to the right, these are explained later in this section.

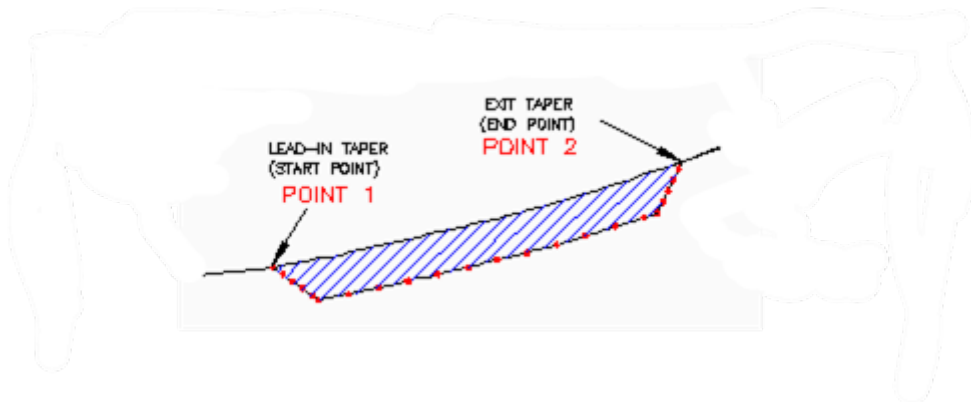
Start & End Reference Points

Start & End Reference Points

☒ Lead-In Taper Start Pt to Exit Taper End Pt

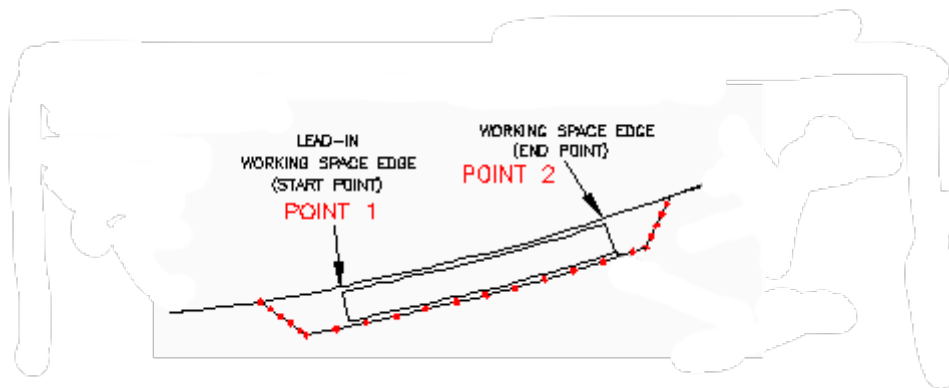
☐ Working Space Start Pt to Working Space End Pt

Lead-In Taper Start Point to Exit Taper End Point



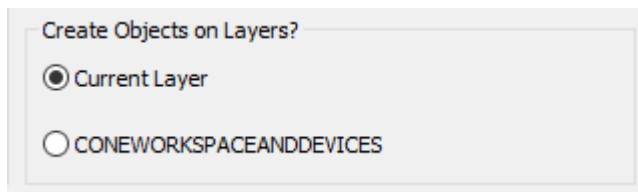
Using this option the start and end points selected on the kerb are the positions of the extreme ends of the cone tapers, the program will take into account any “minimum workspace length” and safety zones you have entered in the dialog box options to ensure there is sufficient space to draw the required

Working Space Start Point to Working Space End Point



Using this option, the two points selected on the drawing will be the start and end of the working space, onto which safety zones and taper lengths will be added when plotting the extents of the works.

Create Objects in Layers



The Objects added by this function will be added to either the current drawing layer, managed by yourself, or the layer named "CONEWORKSPACEANDDEVICES" by selecting one of the two radio buttons in the dialog.

CONE TYPES

CONING TYPE

☒ Symbols (Solid)

☐ Symbols (Circles)

☐ Linetype (With Line)

☐ Linetype (No Line)

☐ Wide Polyline

☐ None

Cone Base Size

☐ 0.7 ☐ 0.6 ☒ 0.5 ☐ 0.4

Coning Line Colour

☒ Match Hatch Colour?

(Symbol types only)

The individual cones inserted onto the drawing can be added in a variety of styles:

Symbols (solid)

Symbols (circles)

Linetype (With Line)

Linetype (No Line)

Wide Polyline

None

Cone Base Size Can be selected from the list of:

0.7

0.6

0.5

0.4

Coning Line Colour

If selected the boundary will be the same colour as the hatching, if blank it will have the colour "BYLAYER"

CONE SPACING: LEAD-IN & EXIT TAPERS

LEAD-IN TAPER & CONING

Taper Rate: ☒ 45Deg ☐ 1:13 ☐ 1:20 ☐ 1:25 ☐ By Length

Taper Length:

Lead-In Taper Cone Spacing: ☐ 1.0 ☒ 1.2 ☐ 1.5 ☐ 3.0 ☐ 9.0

EXIT TAPER & CONING

Taper Rate: ☒ 45Deg ☐ 1:13 ☐ 1:20 ☐ 1:25 ☐ None ☐ By Length

Taper Length:

Exit Taper Cone Spacing: ☐ 1.0 ☒ 1.2 ☐ 1.5 ☐ 3.0 ☐ 9.0

You can set the taper rate and cone spacing on the Lead in and Exit tapers separately in the dialog dependant on the speed of road you are inserting the working space:

Taper Rate :45 degrees

1:13

1:20

1:25

By Length (specify taper length in metres in the edit box)

Taper Cone Spacing

The spacing between individual cones on the tapers can be selected from:

1.0

1.2

1.5

3.0

9.0

LONGITUDINAL CONING

LONGITUDINAL CONING

Cone Spacing: ☐ 1.0 ☐ 1.2 ☐ 1.5 ☐ 3.0 ☐ 4.0 ☒ 6.0 ☐ 9.0 ☐ 18.0

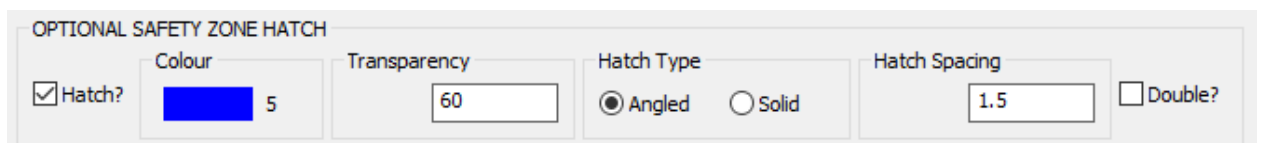
Also On Nearside?: ☒ Yes ☐ No

The spacing distance of cones can be selected from the range:

1.0
1.2
1.5
3.0
4.0
6.0
9.0
18.0

Also on Nearside? Select Yes to insert cones between workzone and footway.

Safety Zone Hatch



OPTIONAL SAFETY ZONE HATCH

☒ Hatch? Colour: 5 Transparency: Hatch Type: ☒ Angled ☐ Solid Hatch Spacing: ☐ Double?

Hatch: check box: check the box if you want the surrounding safety zone hatched, if blank all other options in this section are disabled.

Colour: change the colour value by clicking on the swatch to select another colour

Transparency: the percentage transparency for the hatching, to enable detail on the base map plan to be more easily seen, especially if using the SOLID pattern – NOTE: earlier versions of BricsCAD do not support transparency

Hatch Type: select either Angled (parallel lines) or Solid method of hatching

Hatching Spacing: if using angles lines you can specify spacing between the lines.

Double: checking the double hatching box will draw a checked pattern rather than parallel lines

Optional Direction Signage

Adding signage at the start (and end) tapers of the works is optional and the options depend on the type of workarea selected.

The preview image at the bottom left of the dialog shows the different signage options, and you have the usual Cone sign alignment and scale size options to ensure consistency on your drawing.

OPTIONAL DIRECTION SIGNAGE

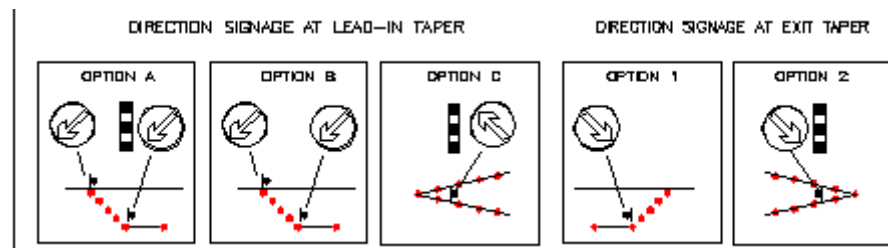
At Lead-In Taper?
☐ None ☒ Opt A ☐ Opt B ☐ Opt C

At Exit Taper?
☐ None ☒ Opt 1 ☐ Opt 2

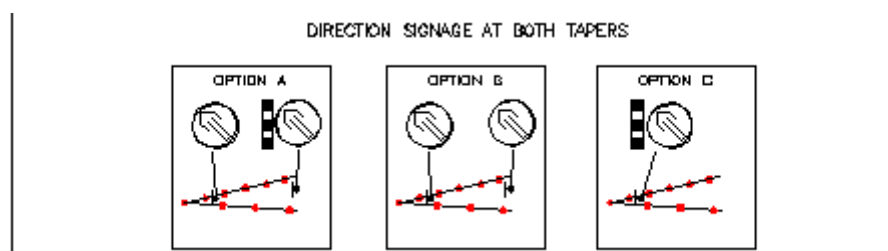
Alignment
☐ Align ☒ Zero

Sign Scale

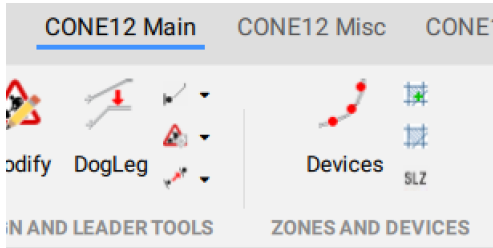
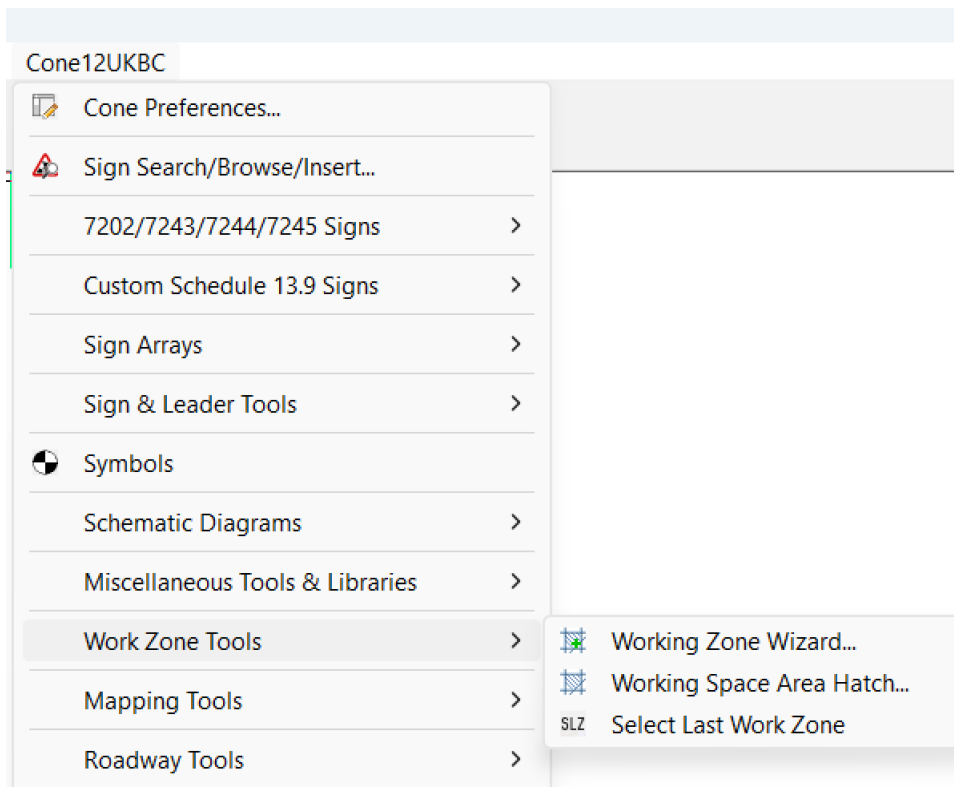
Signage options for Workarea at Nearside of road



Signage options for Workarea in Centre of road



Work Zone Tools – Working Space Area Hatch

Command: CUKWORKSPACE RIBBON: CONE12 Main: ZONES AND DEVICES	
CONE12UKBC Pull Down Menu	
CONE12_UK_Gener al Toolbar	

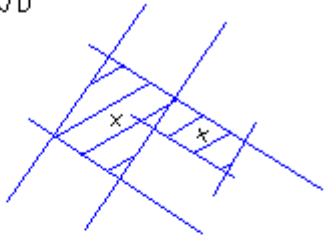
This tool enables you to access the Working Space Area Hatching function.

This tool marks a working area in a variety of ways using a simple hatch pattern at variable spacing, angle and colour.

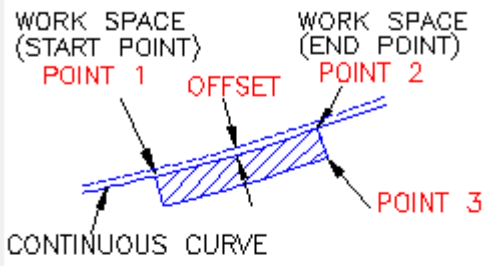
Selecting the tool displays the dialog shown below

CONE WORK SPACE HATCH

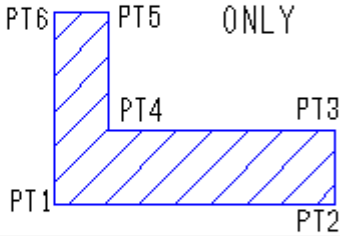
PICK INTERNAL POINTS METHOD

☒

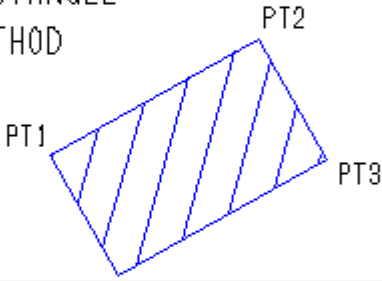
ALIGNED TO CURVE METHOD

☐

MULTI-SIDED METHOD

☐

RECTANGLE METHOD

☐

Create Objects on Layer?

☒ CONE Work Space & Devices Layer ☐ Current Layer

Hatch Type: ☒ Angled ☐ Solid

Hatch Transparency:

Hatch Angle: Hatch Spacing:

☐ Double Hatch

Offset: Aligned to Curve Method Only

Hatch Colour:  5

Add a Barrier ?

☐ None ☐ Blocks ☐ Linetype ☒ Wide Poly

OK Cancel

Pick Internal Points: If you have previously drawn construction lines on the drawing, you can simply click INSIDE the areas to be hatched. NOTE: these must be CLOSED areas, otherwise the cross-hatching may flood out unexpectedly.

Aligned to Curve Method: indicate a continuous polyline. line or curve as one edge of the working Space, then select the start and end points and a finally a width of working space to hatch to complete the hatching.

The Offset distance set below will give an optional offset from the baseline to the near edge of the working space.

Multi-Sided Method: indicate a string of points sequentially around the work area boundary, the function will automatically close from the last point to the starting point for you. Press return to complete the hatching.

Rectangle Method: Dynamically indicate two points along the length of the workarea, then drag the width to suit.

NOTE: after the hatching has been drawn, if you modify the boundary lines, the hatching will redraw to suit.

Hatch Angle: the angle the hatching lines are drawn, relative to the horizontal axis, not the boundary of the work area.

Hatch Spacing: distance between the parallel lines (in drawing units)

Double Hatch: this check box will make the tool use a squared hatching pattern if checked.

Colour: Select from the list of available standard colours.

Offset: Enter the distance from the reference curve to the edge of the working space. This ONLY works with the Aligned to Curve method.

NOTE: entering a negative distance has no effect as to the side of the offset.

Add a Barrier:

You have four options for drawing a border to the hatched area:

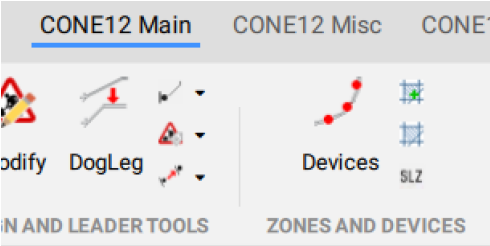
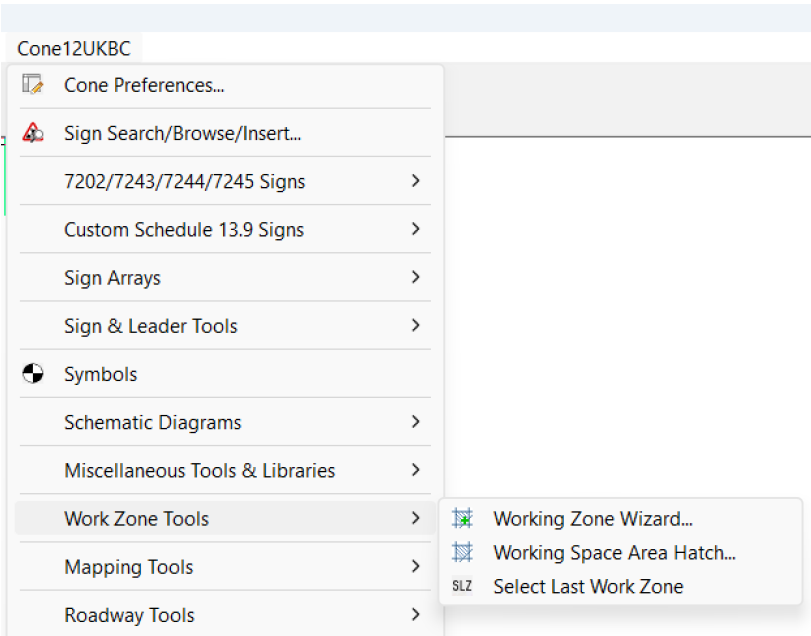
None : No boundary added

Blocks: will add multiple instances of block "P_BARRIER_20" around the perimeter of the hatched area.

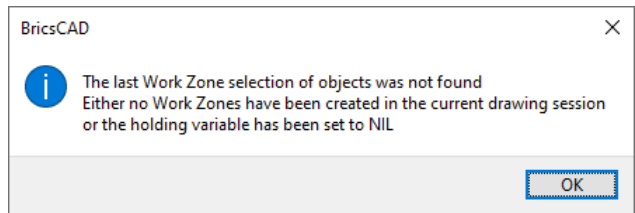
Linetype: Will add a polyline with linestyle "PBARRIER20" around the perimeter of the hatched area

Wide Poly: Will add a boundary polyline with linestyle "continuous" and a global width of 0.3 (metres)

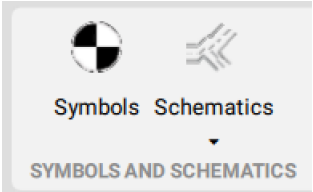
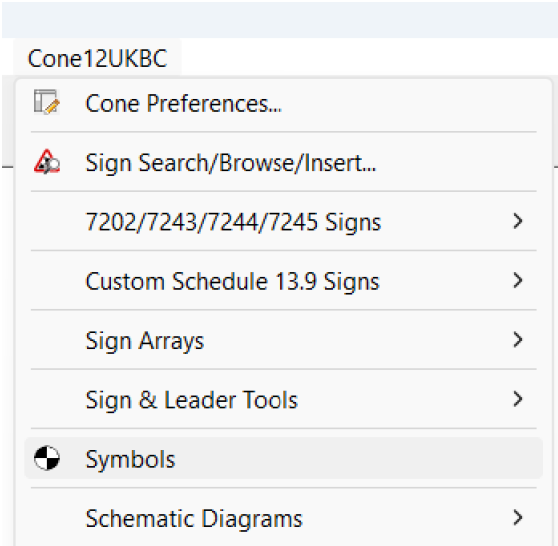
Work Zone Tools – Select Last Work Zone

Command: CUKLASTWZ RIBBON: CONE12 Main: ZONES AND DEVICES	
CONE12UKBC Pull Down Menu	
CONE12_UK_General Toolbar	

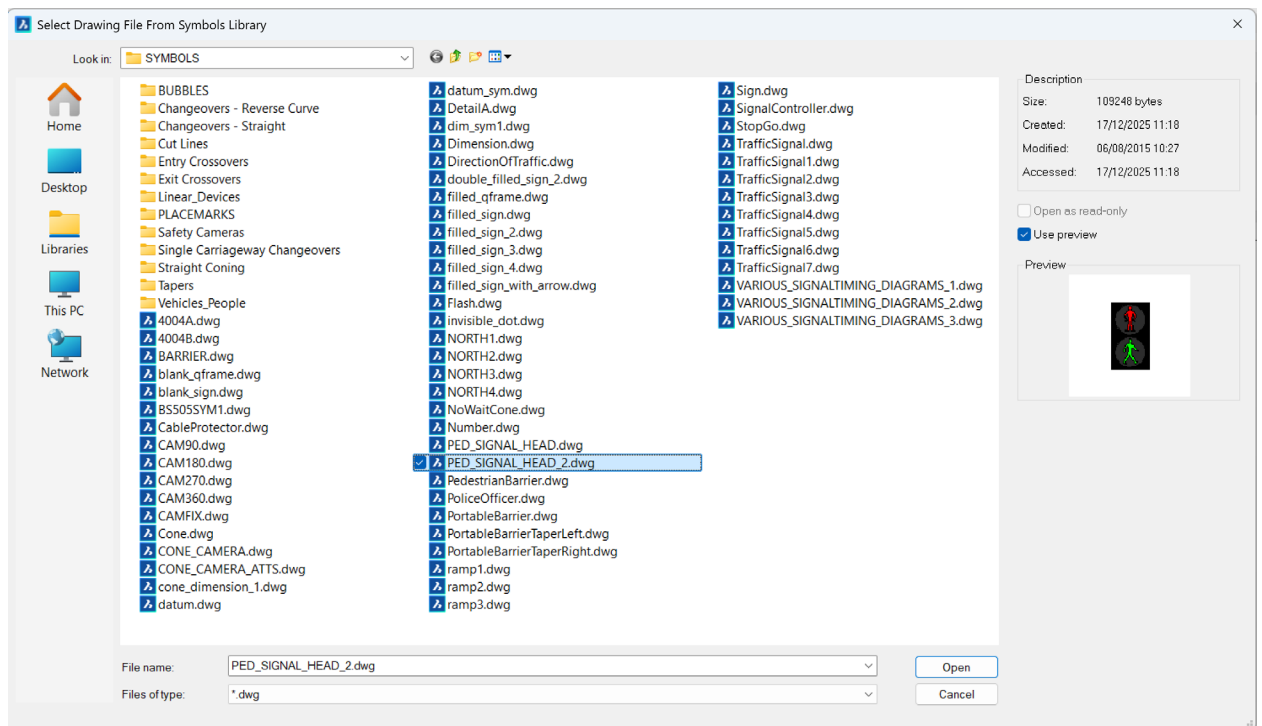
This function will select all the elements from the last inserted Work Zone. This can be an easy way of moving them to another part of the drawing, or simply erasing them without having to use the CAD undo function.



Symbols

Command: CUKSYMBOLS RIBBON: CONE12 Misc SYMBOLS AND SCHEMATICS	
CONE12UKBC Pull Down Menu	
CONE12_UK_General Toolbar	

Symbols are simple drawings that you can use to enhance your drawings



The symbol library contains a number of drawing files in the root of the library

Others are organised by subject in the sub folders

Select each drawing name and the preview will be presented.

Pick the Open button or double click the file name to start the insertion routine.

The Scale and Rotation Angle of these symbols and schematics are governed by the settings in CONE PREFERENCES

Introduction to Schematic Segments & Layouts

CONE Schematics are diagrammatic representations of basic roads, junctions and roundabouts with and without signs and channelling devices. The actual sizes of the roads are not real-world sizes

There are five type of schematics diagrams: Basic, Segments and Layouts

Basic: Roads, Junctions, Roundabouts and Bends that have no signs or channelling devices

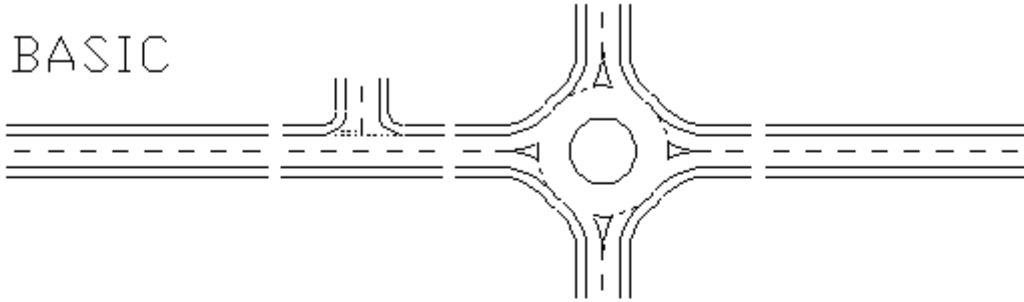
Segments: Parts of a Layout (Advance Warning, Transitions, Works Access etc.)

Layouts: Complete layout for a typical scheme (Example Typical Layout TL-SC5)

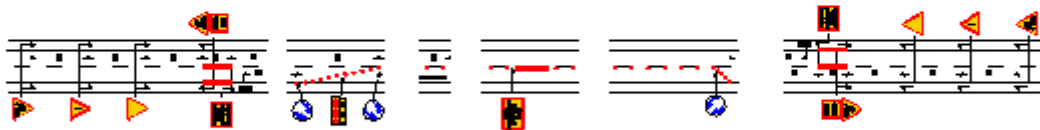
TSAM Wizard: pre-drawn standard solutions for most common instances.

Emergency TM: Road closures for use by Police or Traffic Officers

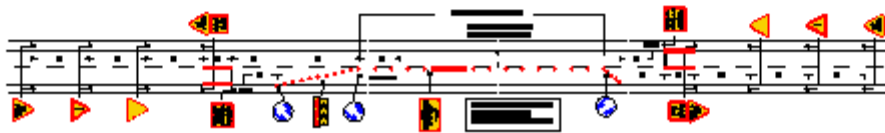
BASIC



SEGMENTS

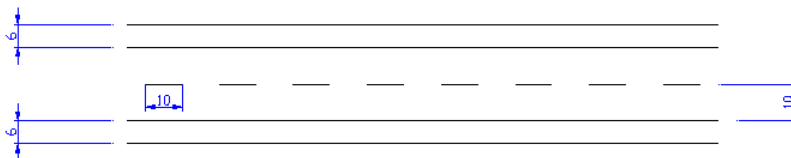


LAYOUTS

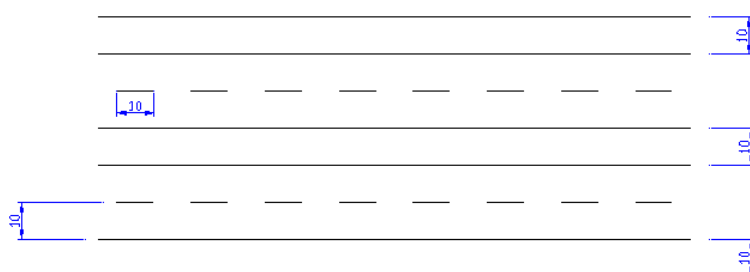


All three types are designed to sit on top of each other and snap together

SINGLE CARRIAGEWAY



DIVIDED HIGHWAYS



The standard schematic lane widths used in CONE schematics are:

Divided Highways:

Lane & Shoulder Width = 10 units

Single Carriageway:

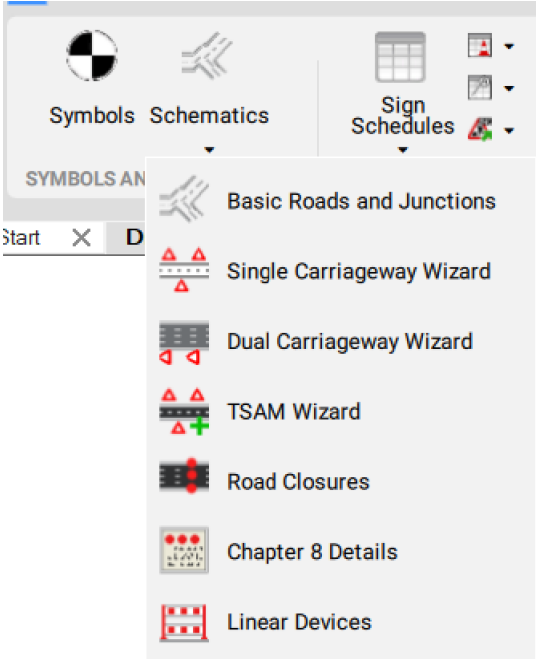
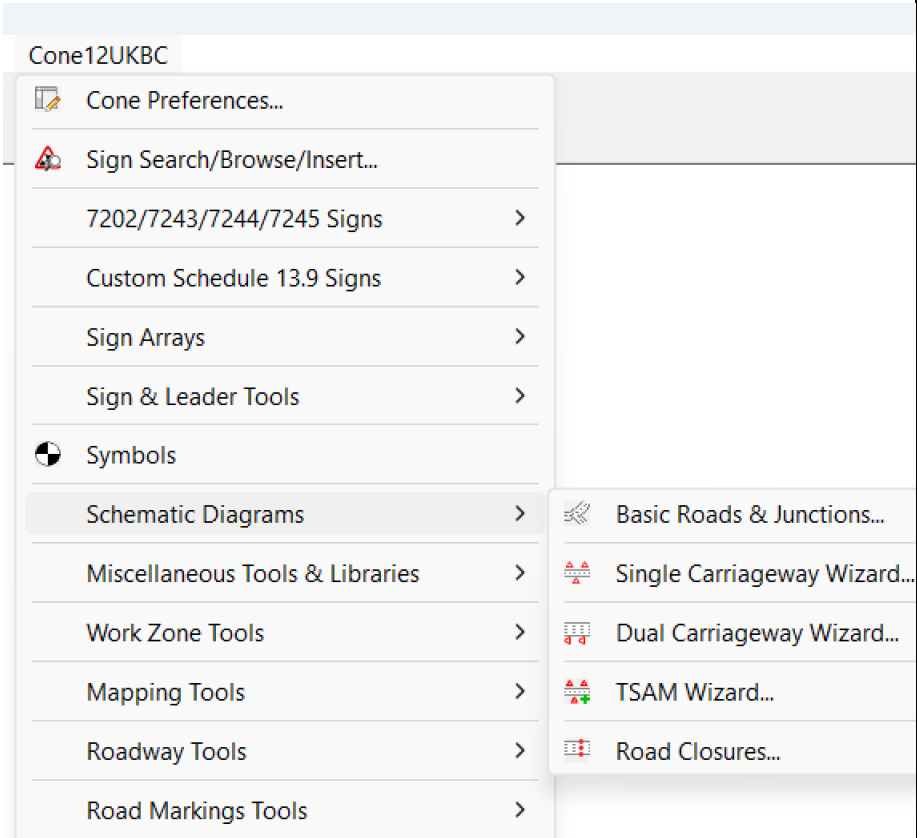
Lane Width = 10 units

Shoulder Width = 6 units

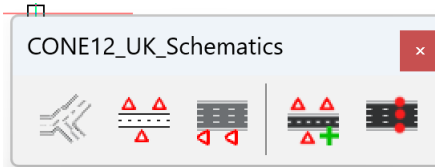
The length of the dashed line that represents lane marking is 10 units

The Roadway tool when used in schematic mode also uses the above lane and shoulder widths

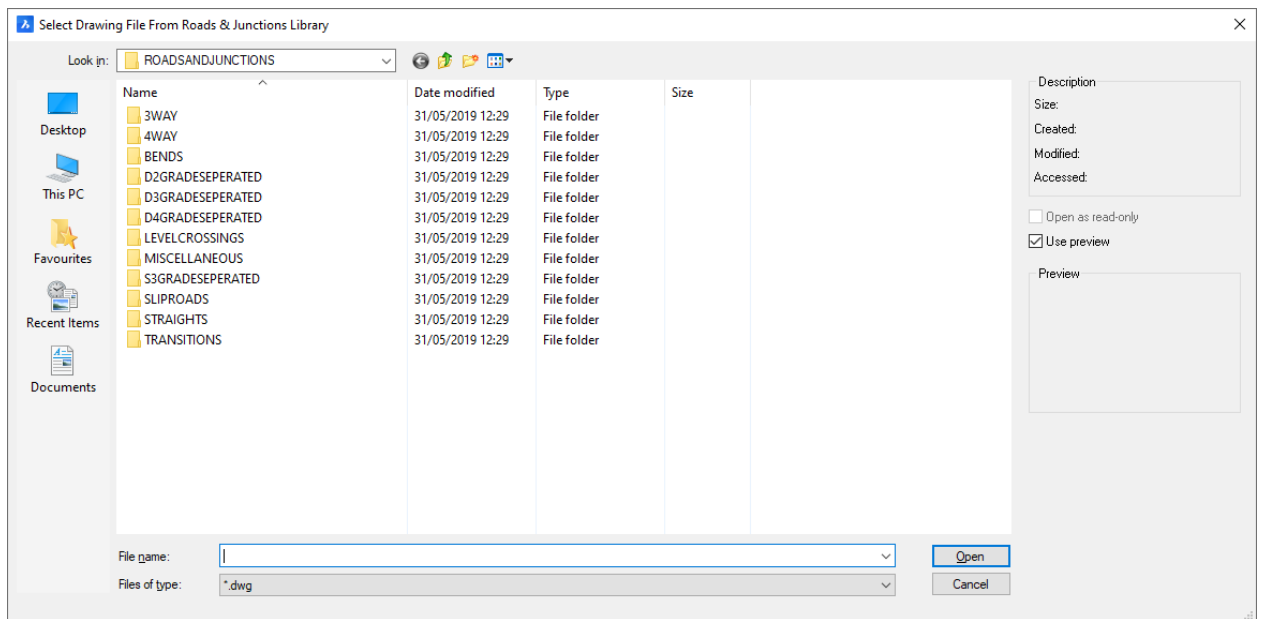
Schematic Diagrams - Basic Roads & Junctions

Command: CUKROADS RIBBON: CONE12 Misc SYMBOLS AND SCHEMATICS	 The screenshot shows the CUKROADS ribbon in the software interface. The 'Schematic Diagrams' tab is selected, and its dropdown menu is open. The menu contains the following items: 'Basic Roads and Junctions' (with a road junction icon), 'Single Carriageway Wizard' (with a single road icon), 'Dual Carriageway Wizard' (with a dual road icon), 'TSAM Wizard' (with a road and traffic light icon), 'Road Closures' (with a road and red X icon), 'Chapter 8 Details' (with a grid icon), and 'Linear Devices' (with a road and sign icon).
CONE12UKBC Pull Down Menu	 The screenshot shows the 'Cone12UKBC' pull-down menu. The menu is open, showing a list of options. The 'Schematic Diagrams' option is highlighted, and its sub-menu is also open, showing the same options as the ribbon menu: 'Basic Roads & Junctions...', 'Single Carriageway Wizard...', 'Dual Carriageway Wizard...', 'TSAM Wizard...', and 'Road Closures...'. Other options in the main menu include 'Cone Preferences...', 'Sign Search/Browse/Insert...', '7202/7243/7244/7245 Signs', 'Custom Schedule 13.9 Signs', 'Sign Arrays', 'Sign & Leader Tools', 'Symbols', 'Miscellaneous Tools & Libraries', 'Work Zone Tools', 'Mapping Tools', 'Roadway Tools', and 'Road Markings Tools'.

CONE12_UK_Schematics toolbar



This tool enables access to the basic roads and junctions library which is divided into the following sub-folders



3WAY_JUNCTIONS

4WAY_JUNCTIONS

BENDS

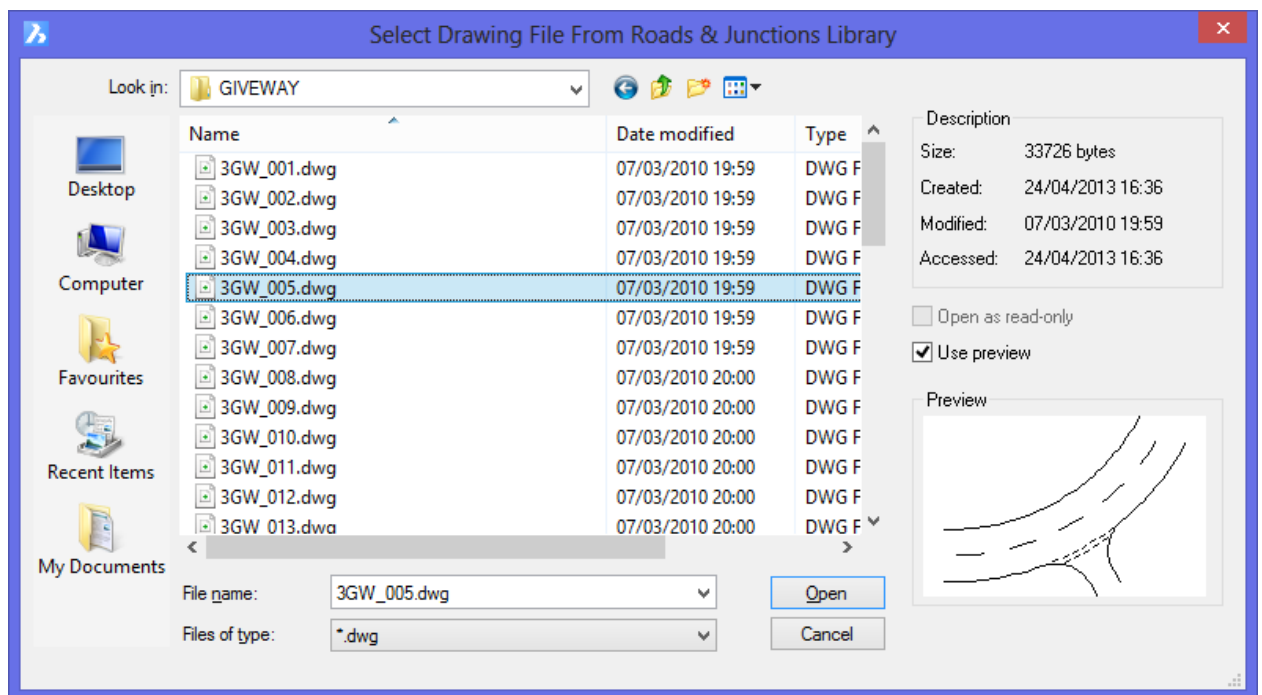
ROUNABOUTS

SLIPROADS

SPECIFIC_JUNCTIONS

STRAIGHTS

Some of the above folders are also subdivided into various sub-folders



In the example here the selection was:

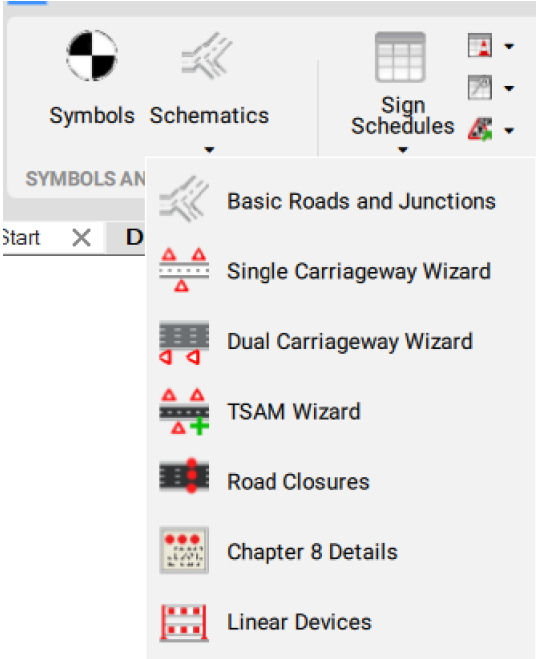
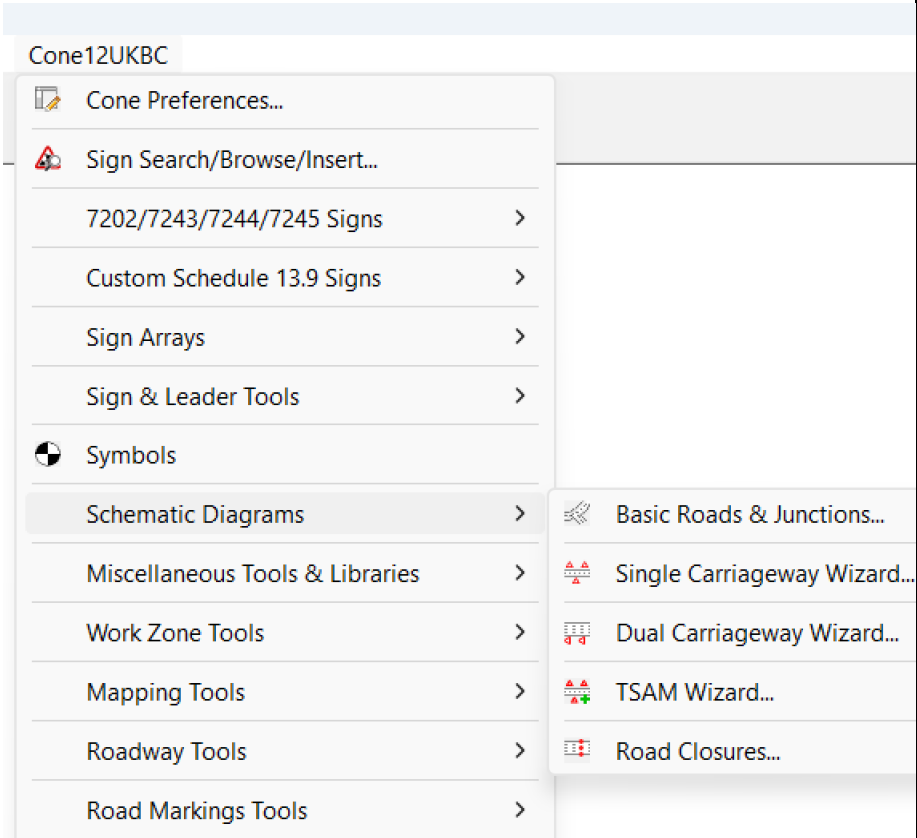
CONE11UKBC > Schematic Diagrams > Basic Roads & Junctions > 3WAY > GIVE WAY

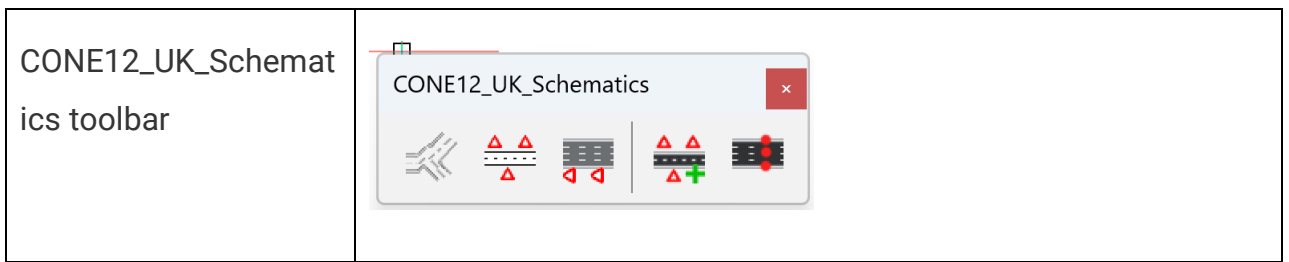
Select each drawing name and the preview will be presented.

Pick the Open button or double click the file name to start the insertion routine.

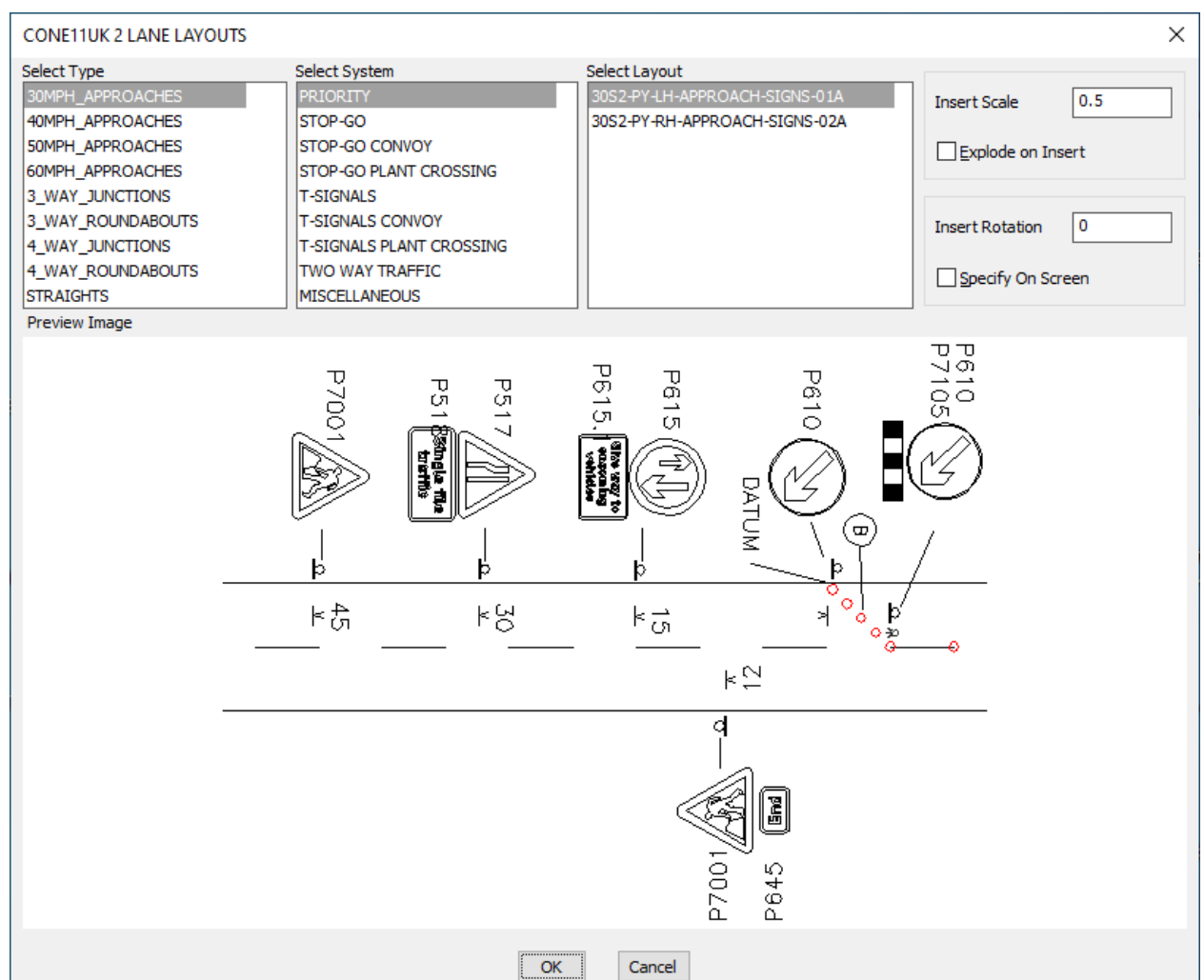
The Scale and Rotation Angle of these schematics are governed by the settings in CONE PREFERENCES

Schematic Diagrams - Single Carriageway Wizard

Command: CUK2LANEWIZARD RIBBON: CONE12 Misc SYMBOLS AND SCHEMATICS	
CONE12UKBC Pull Down Menu	



This tool enables access to the Single Carriageway Typical Layouts library, a series of pre-drawn schematic diagrams for common TM situations, for use on scale maps, see the section on Single Carriageway Sign Arrays.



Make your selection from the list of options:

Select Type: 30mph Approaches, 40mph Approaches, 50mph Approaches, 60mph Approaches, 3-Way Junctions, 3-Way Roundabouts, 4-Way Junctions, 4-Way Roundabouts, Straights

Insert Scale: Priority, STOP-GO, STOP-GO Convoy, STOP-GO Plant Crossing, T-Signals, T-Signals Convoy, T-Signals Plant Crossing, 2-Way Traffic, Miscellaneous (NOTE not all options are available dependant on previous **Select Type** list option)

Select Layout: once selection from the previous lists is made, this list will display the matching details.

Select the layout required from the **Select Layout** list and pick the **OK** button to have the drawing inserted using the insert settings as defined in the Insert Settings area of the dialog

Insert Scale: normally left at 1, changing this will make the detail smaller or larger

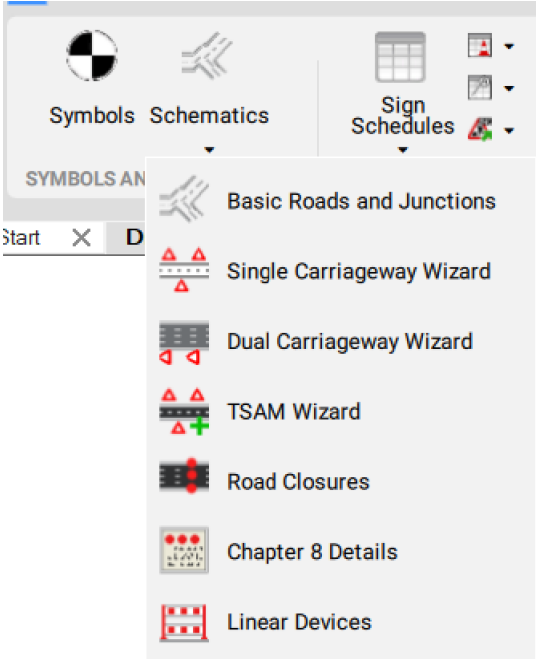
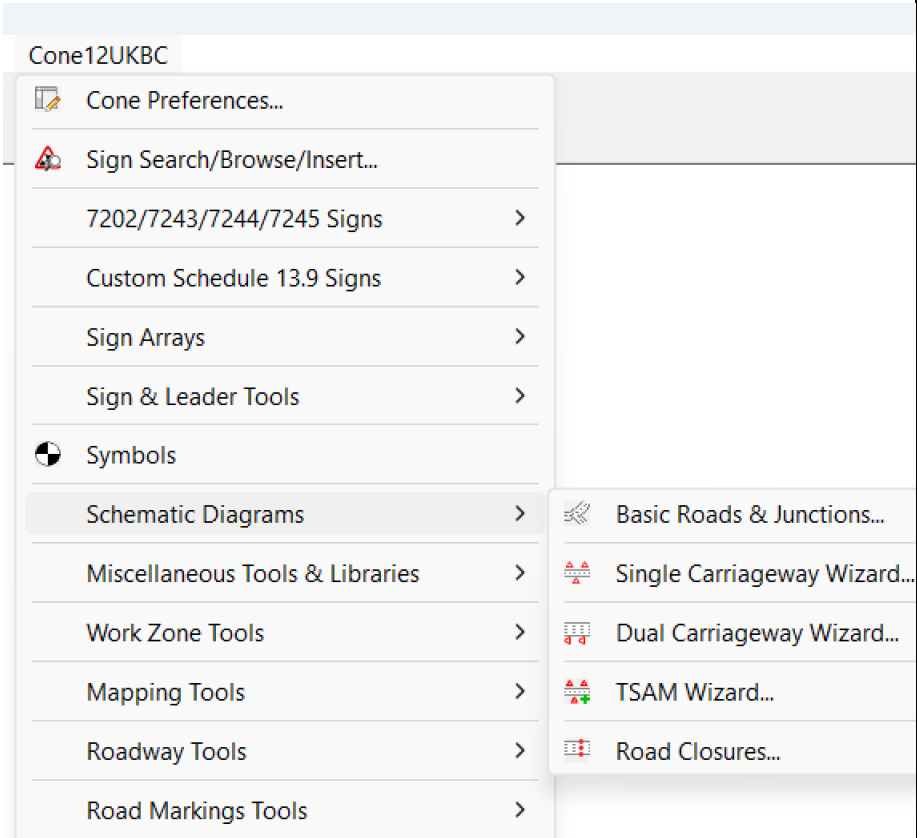
Explode on Insert: the detail will be inserted as a block to enable you to move all items together, checking this box will break it into its individual elements (NOTE individual signs are not exploded)

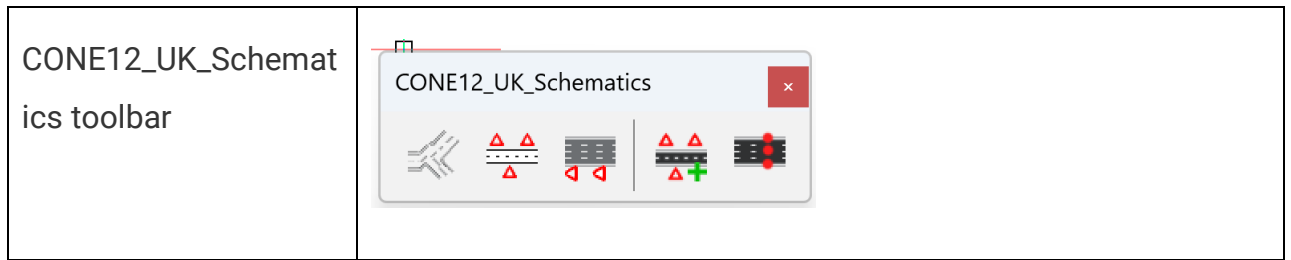
Insert Rotation: specify a rotation for the detail

Specify on Screen: check this box to rotate the detail dynamically when inserted to line up to existing drawn elements.

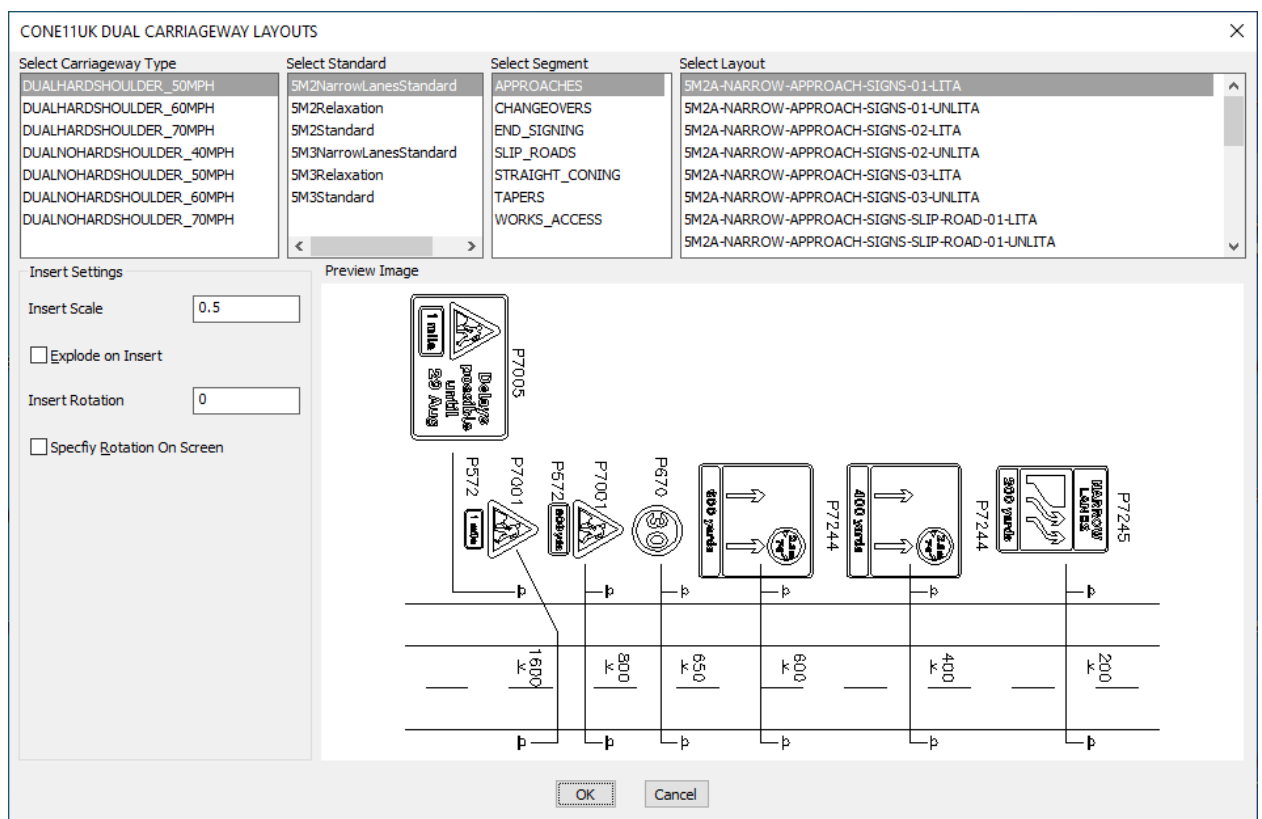
You select the drawing layout required and pick the **OK** button to have the drawing inserted using the insert settings specified in the dialog

Schematic Diagrams - Dual Carriageway Wizard

Command: CUKDUALWIZARD RIBBON: CONE12 Misc SYMBOLS AND SCHEMATICS	
CONE12UKBC Pull Down Menu	



This tool enables access to the Divided Highway Segments library, a series of pre-drawn schematic diagrams for common TM situations, for use on scale maps, see the section on Dual Carriageway Sign Arrays



Working from left to right you make selections from lists or radio buttons:

Select Carriageway Type: Dual Hardshoulder 50mph, Dual Hardshoulder 60mph, Dual Hardshoulder 70mph, Dual No Hardshoulder 40mph, Dual No Hardshoulder 50mph, Dual No Hardshoulder 60mph, Dual No Hardshoulder 70mph (Note: not all segments are available at higher speeds)0

Select Standard: 5M2 Narrow Lanes Standard, 5M2 Relaxation, 5M2 Standard, 5M3 Narrow Lanes Standard, 5M3 Relaxation, 5M3 Standard

Select Segment: Approaches, Changeovers, Crossovers, End signing, Slip roads, Straight coning, Tapers, Works Access (NOTE: not all options are available depending on standard selected).

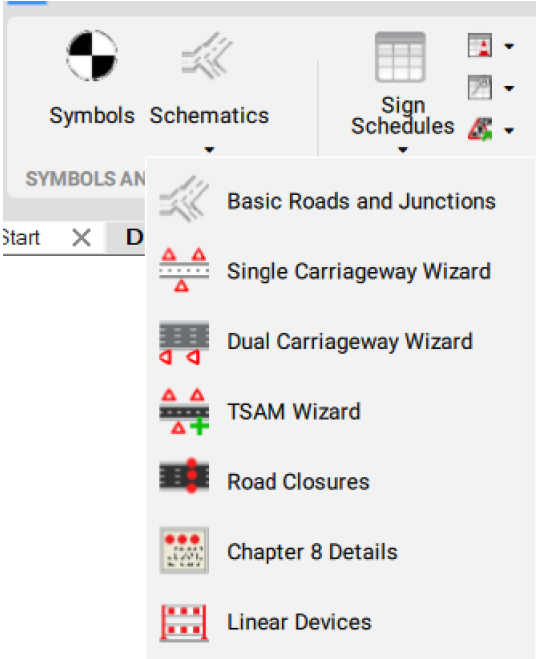
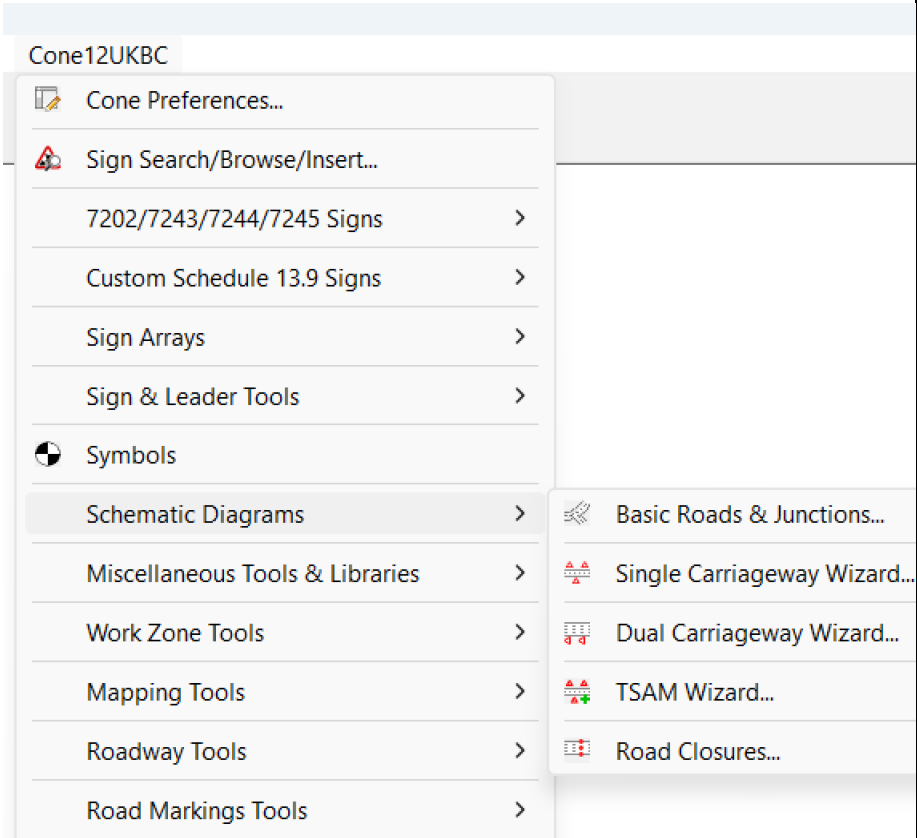
Select Layout: This is the list of matching details

Having made your selection a list of available segment drawings are presented in the **Select Layout** list

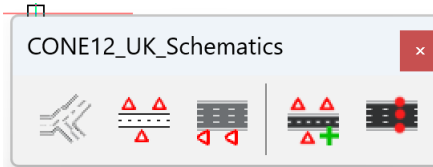
Along with a slide image of the drawing

Select the drawing segment required and pick the **OK** button to have the drawing inserted using the insert settings as defined in the **Insert Settings** area of the dialog.

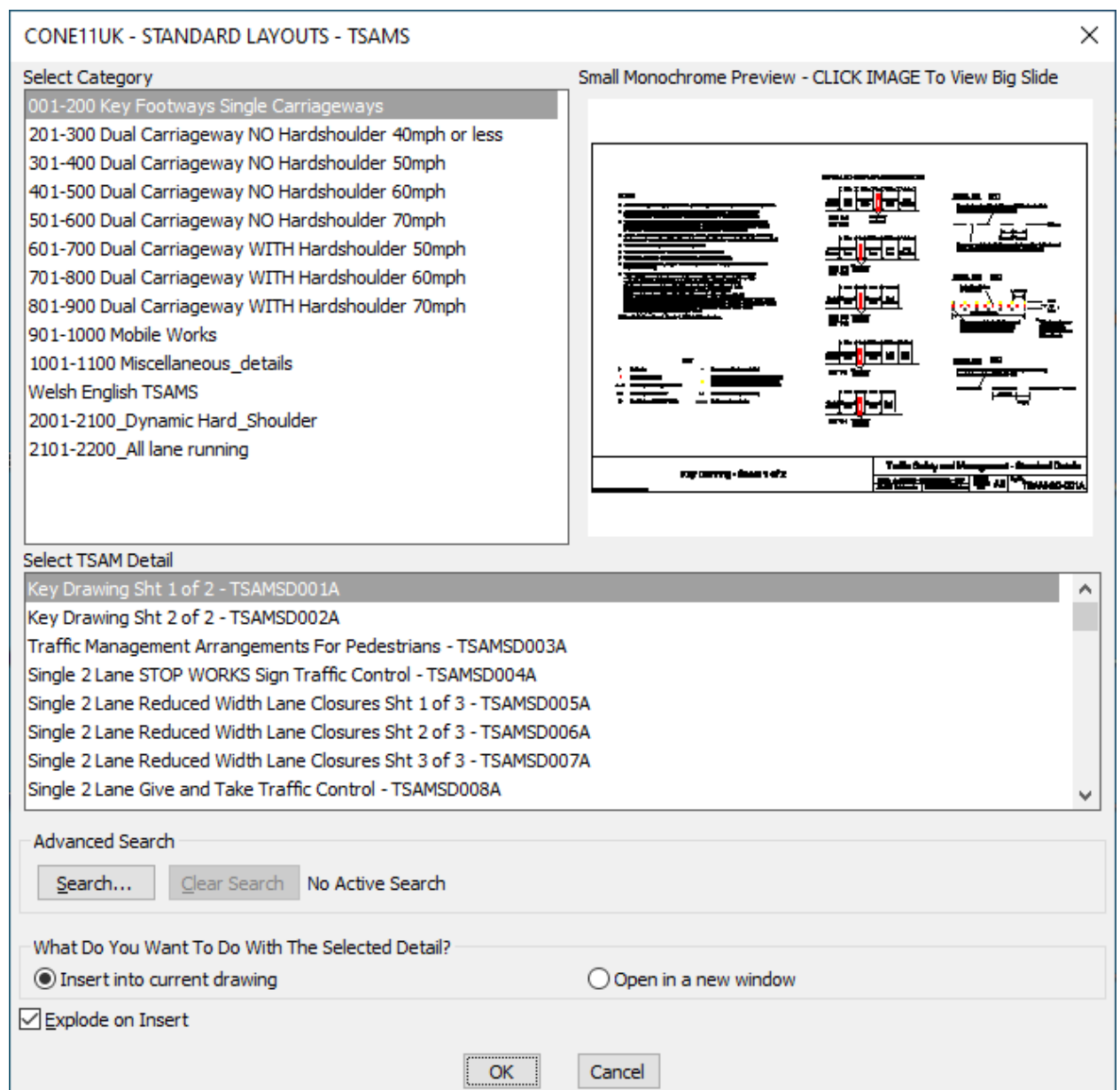
Schematic Diagrams - TSAM Wizard

Command: CUKTSAMWIZARD RIBBON: CONE12 Misc SYMBOLS AND SCHEMATICS	
CONE12UKBC Pull Down Menu	

CONE12_UK_Schematics toolbar



This tool enables access to the Standard Layouts – TSAMS library



There are over 400 drawing files each containing multiple details within 11 categories. To enable you select the pre-drawn detail you want, first choose from the lists of options

Working from left to right top to bottom you make selections from lists or radio buttons:

Select Category: TSAMS are split into Single/Dual carriageways, number of lanes and Speed limits

Select TSAM Detail: TSAMS that match the previous selection are shown in this list, selecting one will show you a preview at the top right of the dialog.

What do you want to do with the detail?

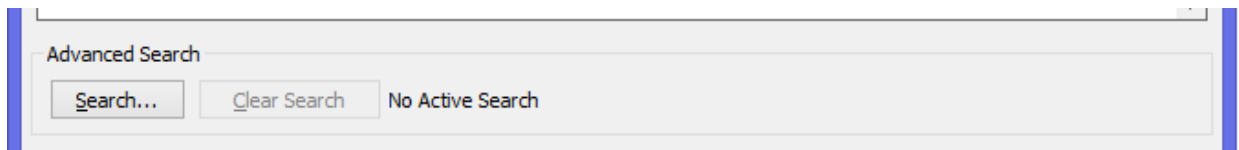
Insert into Current Drawing: The detail will be inserted into your currently open drawing, including the TSAM title block

Open in a new window: The detail will be inserted into a new drawing, allowing you to copy/paste into your own drawing

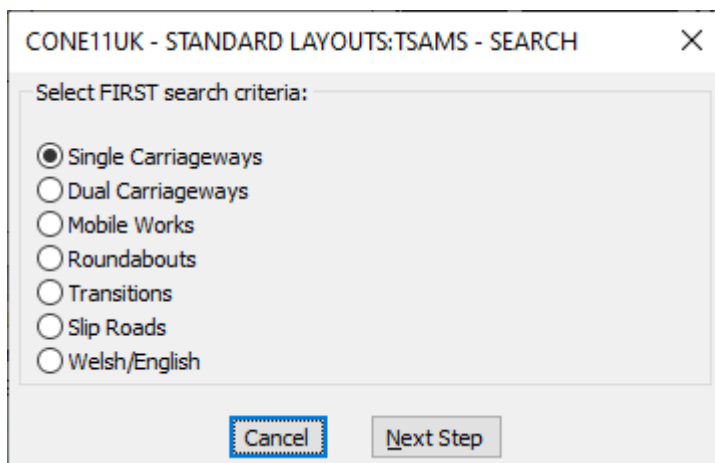
View the PDF: The detail will be opened from a PDF file (NOTE: you must have a copy of Adobe Reader, or other program able to open/display PDF format files for this option to work).

Explode on Insert: If using either of the drawing options above, the TSAM will be inserted as a single block unless this box is checked, if checked the TSAM will be exploded into its individual CAD elements though all signs and CONE devices remain unexploded.

Advanced Search



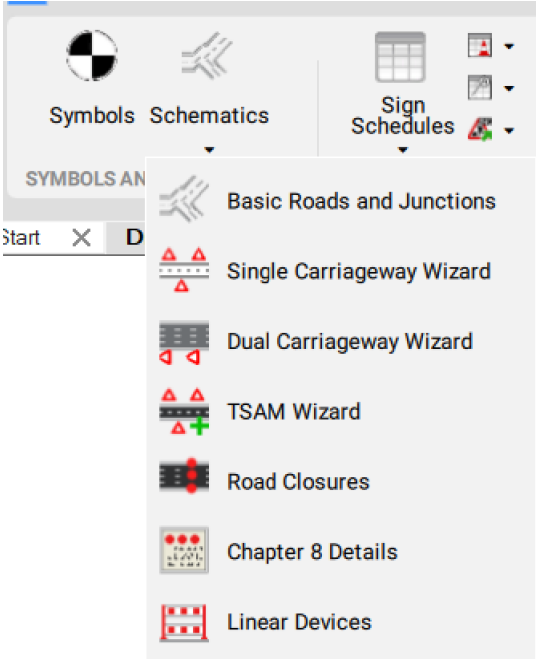
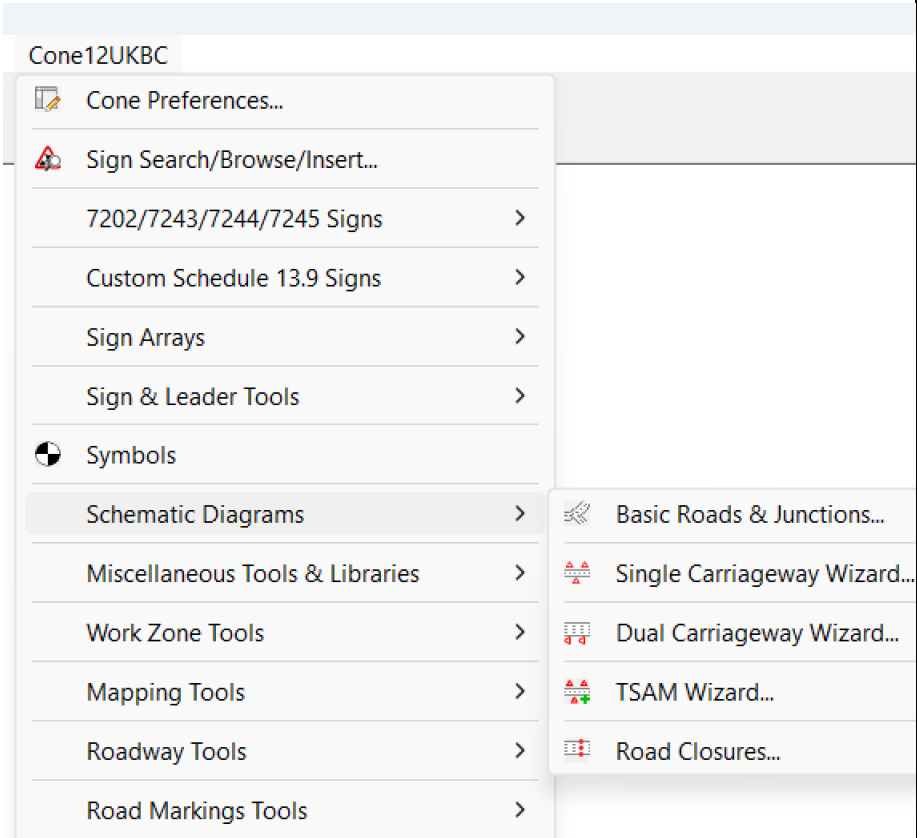
To enable you to select a detail more easily, we have included a search function, where you simply make a series of choices from the radio buttons in the dialogs you will be presented.



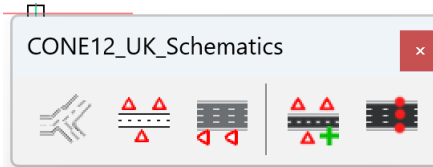
Dependant on your selections, there are up to four levels of search dialog, some options may be unavailable as there are no matching TSAM details.

Once you have made your selections, CONE10 will display the number of matching details, and return you to the TSAM selection dialog. The Select Category list will be locked, as the search function will list only the matching TSAM details. Select the detail as you would above. The search is stored during your current drawing session, to clear it, or start another search, press the **Clear Search** or **Search...** button.

Schematic Diagrams - Road Closures

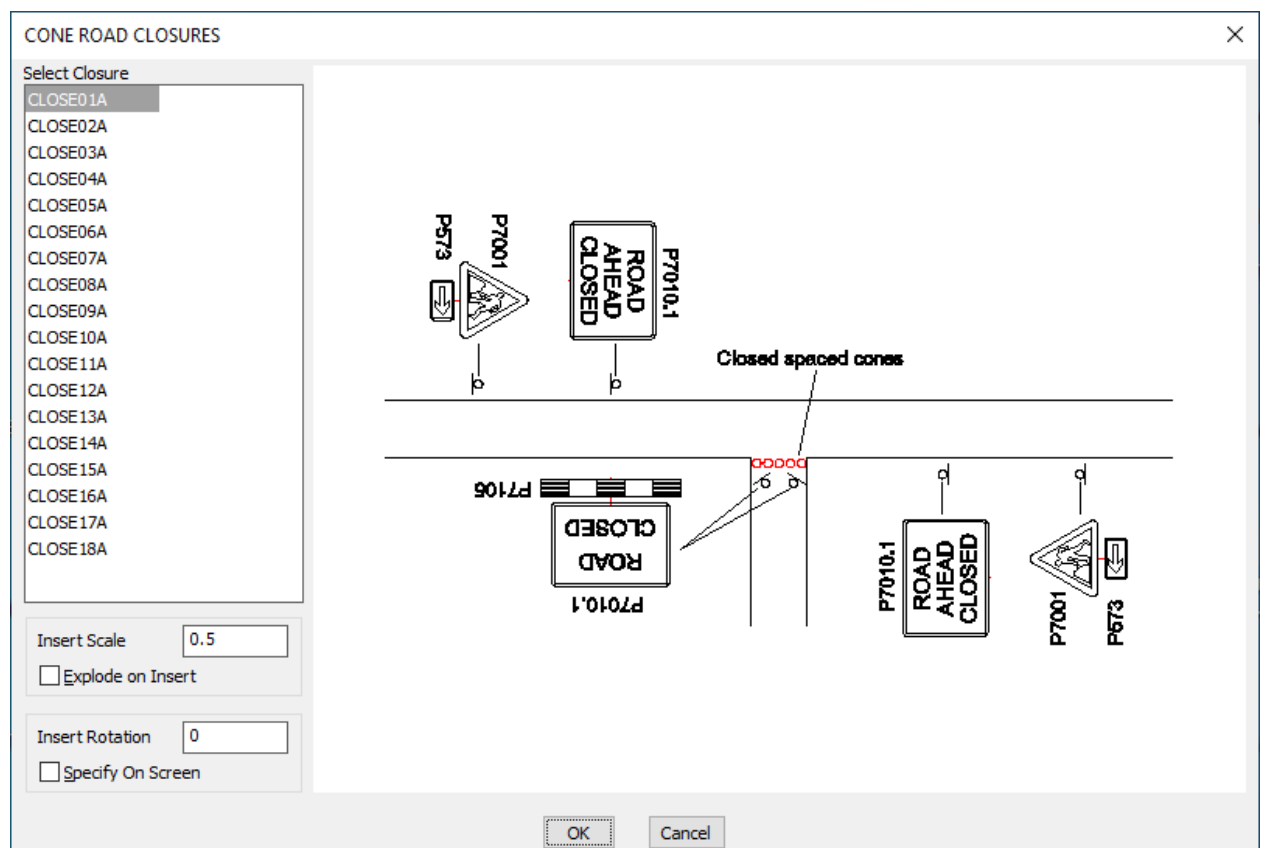
Command: CUKROADCLOSURES RIBBON: CONE12 Misc SYMBOLS AND SCHEMATICS	 The screenshot shows the CONE12 ribbon with the 'Schematic Diagrams' dropdown menu open. The menu includes options: Basic Roads and Junctions, Single Carriageway Wizard, Dual Carriageway Wizard, TSAM Wizard, Road Closures, Chapter 8 Details, and Linear Devices. The 'Road Closures' option is highlighted.
CONE12UKBC Pull Down Menu	 The screenshot shows the 'Cone12UKBC' pull-down menu. The menu items are: Cone Preferences..., Sign Search/Browse/Insert..., 7202/7243/7244/7245 Signs, Custom Schedule 13.9 Signs, Sign Arrays, Sign & Leader Tools, Symbols, Schematic Diagrams, Miscellaneous Tools & Libraries, Work Zone Tools, Mapping Tools, Roadway Tools, and Road Markings Tools. The 'Schematic Diagrams' item is highlighted, and its sub-menu is visible, showing: Basic Roads & Junctions..., Single Carriageway Wizard..., Dual Carriageway Wizard..., TSAM Wizard..., and Road Closures...

CONE12_UK_Schematics toolbar



RIBBON: CONE11 Part 2: Symbols and Schematics

This tool enables access to the Road Closures Layouts library



Select the detail required from the **Select Closure** list, a preview image of the details appears to the right of the dialog.

Insert Scale: normally left at 1, changing this will make the detail smaller or larger

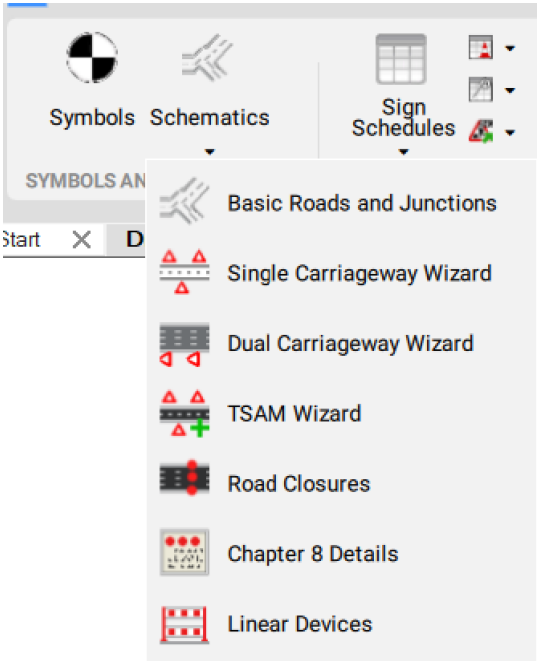
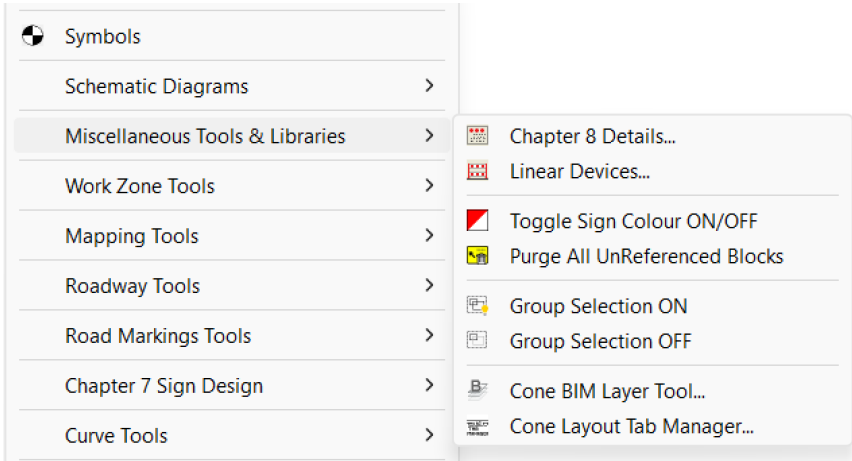
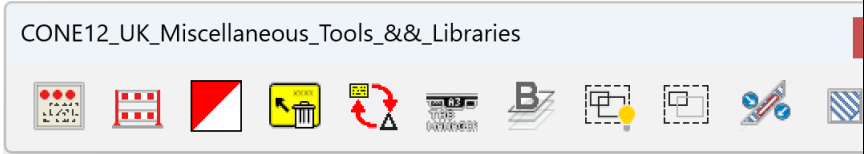
Explode on Insert: the detail will be inserted as a block to enable you to move all items together, checking this box will break it into its individual elements (NOTE individual signs are not exploded)

Insert Rotation: specify a rotation for the detail

Specify on Screen: check this box to rotate the detail dynamically when inserted to line up to existing drawn elements.

You select the drawing layout required and pick the **OK** button to have the drawing inserted using the insert settings specified in the dialog

Miscellaneous Tools & Libraries – Chapter 8 Details

Command: CUKCHAPTER8 RIBBON: CONE12 Misc SYMBOLS AND SCHEMATICS	
CONE12UKBC Pull Down Menu	
CONE12_UK_Miscellaneous us Tools and Libraries	

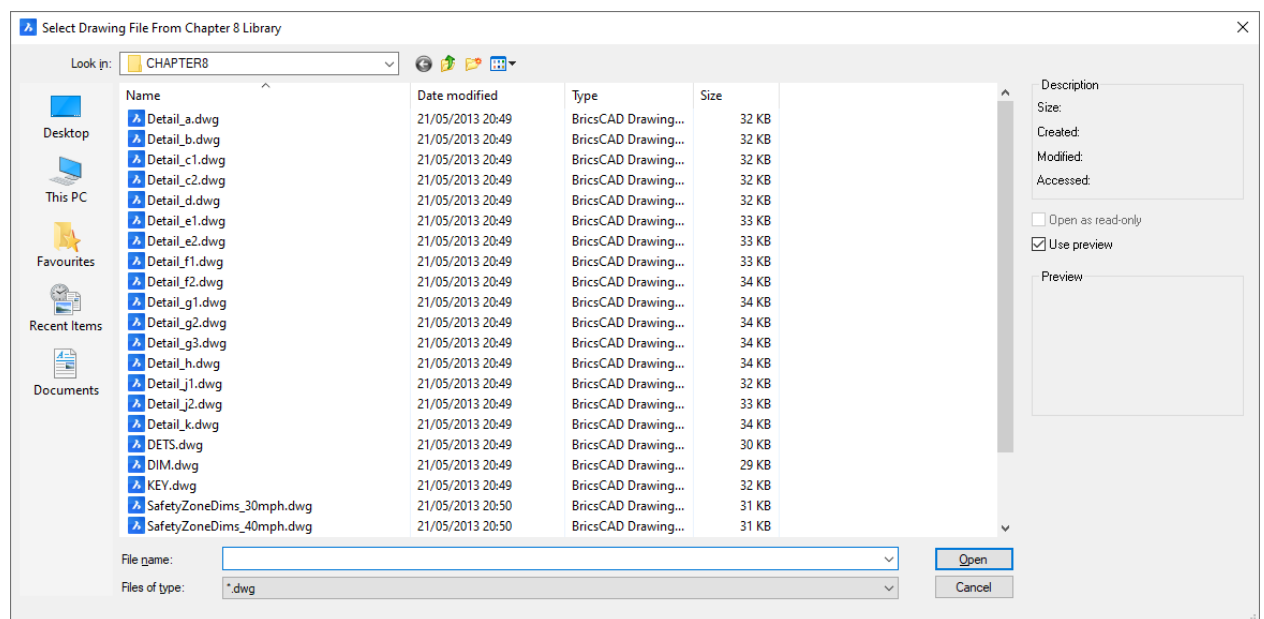
This tool enables you to access the Chapter 8 Details library. These are a series of smaller notes that can be inserted onto your drawing to give additional information.

Selecting the menu option displays the following dialog box, letting you select a file.

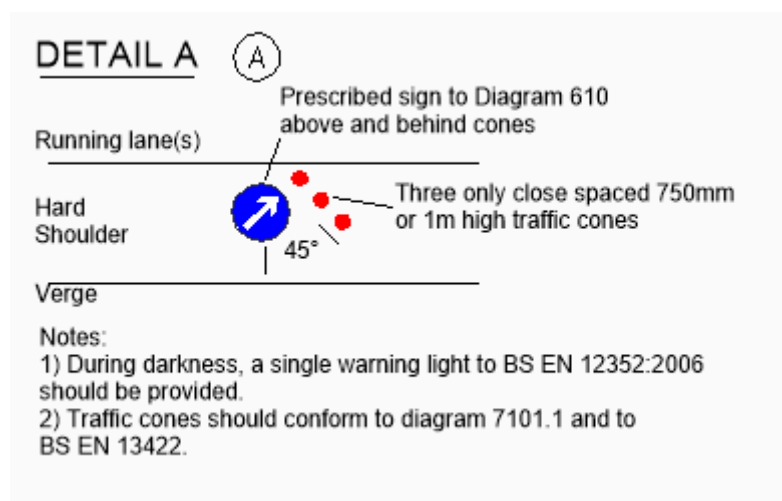
As a file is selected, a preview is shown at the right of the dialog.

Click Open to insert the detail on your drawing, you will be prompted for a location.

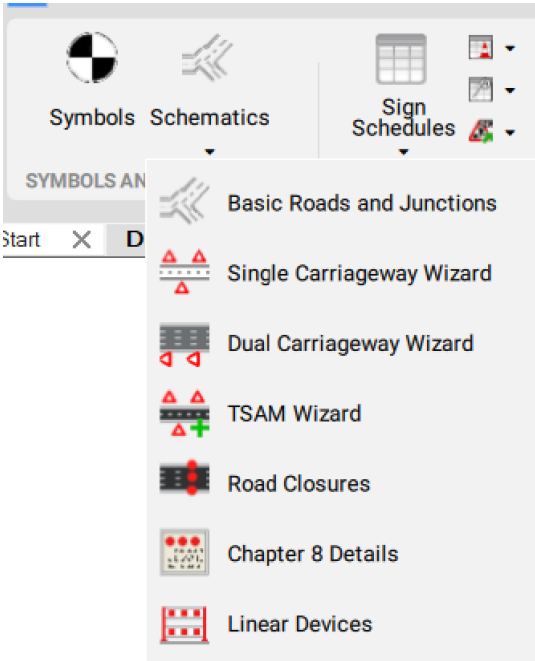
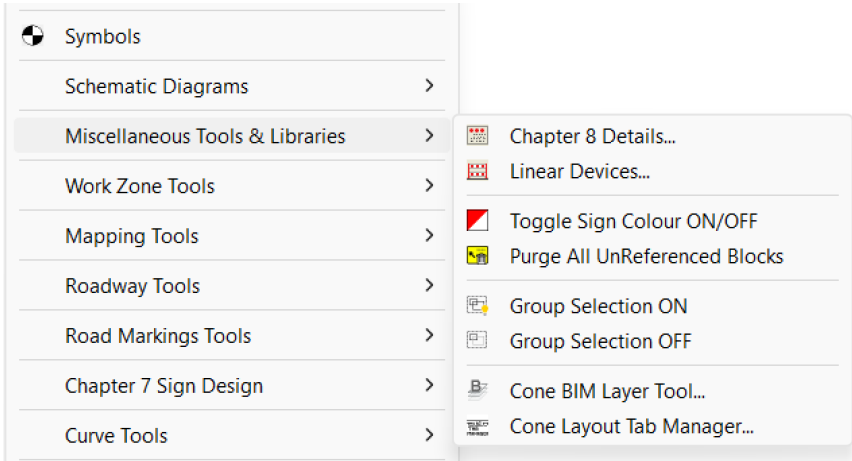
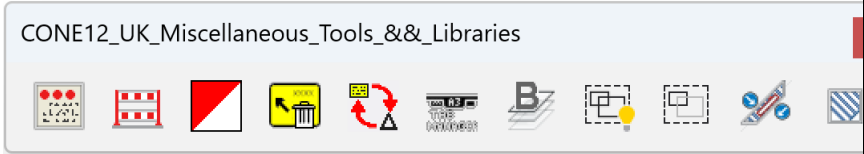
NOTE: the detail is inserted as a block, so all text/icons can be easily moved together.



Example of "Detail A" when inserted onto a drawing



Miscellaneous Tools & Libraries – Linear Devices

Command: CUKLINEAR RIBBON: CONE12 Misc SYMBOLS AND SCHEMATICS	
CONE12UKBC Pull Down Menu	
CONE12_UK_Miscellaneous Tools and Libraries	

This tool enables you to access the Linear Devices library. These are a series of small individual devices that can be inserted onto your drawing to give additional information.

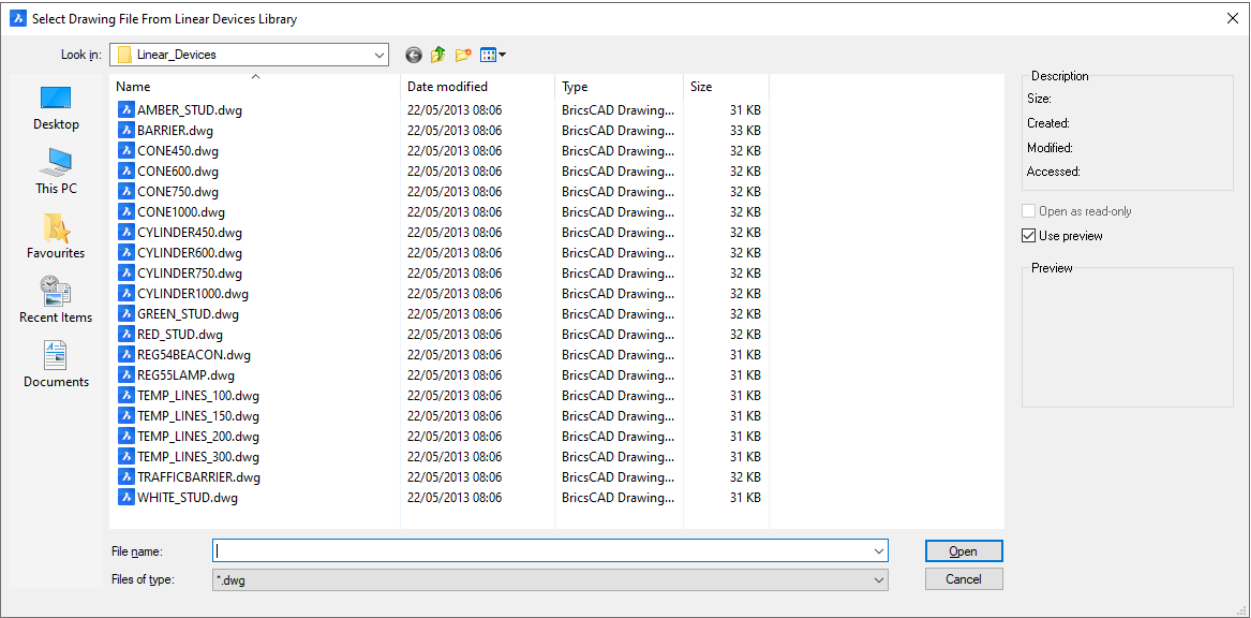
The library contains icons of various Traffic Management devices to insert on your drawing.

Selecting the menu option displays the following dialog box, letting you select a file.

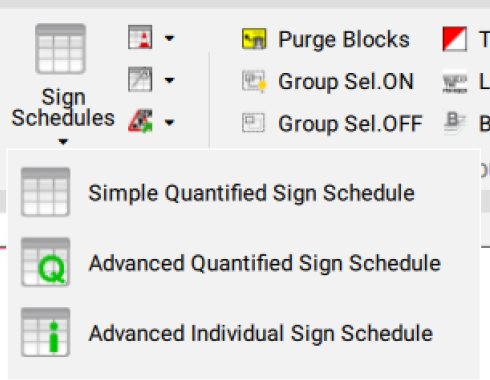
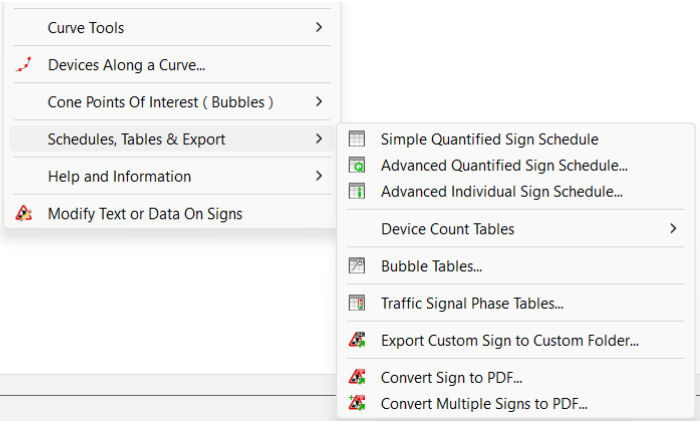
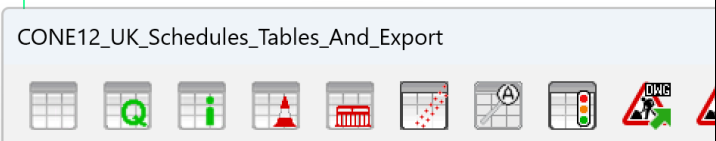
As a file is selected, a preview is shown at the right of the dialog.

Click Open to insert the detail on your drawing, you will be prompted for a location.

NOTE: the device is inserted as a block, so can be easily moved at a later time.



Schedules Tables & Export - Simple Quantified Sign Schedule

Command: CUKSIMPLESCHEDULE RIBBON: CONE12 Misc Sign Schedules	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Schedules_Tables_And_Export	

The CONE Sign Scheduler can create three types of sign schedule

IMPORTANT NOTE: If you are using BricsCAD v19 or earlier, please check the box at the top right of the CONE PREFERENCES dialog titled

CREATE TABLES WITH PRIMITIVE OBJECTS WHERE APPLICABLE

this will prevent the using the newer table feature which may lead to loss of drawing elements in older copies of the CAD program.

Simple Quantified Sign Schedule

Advanced Quantified Sign Schedule

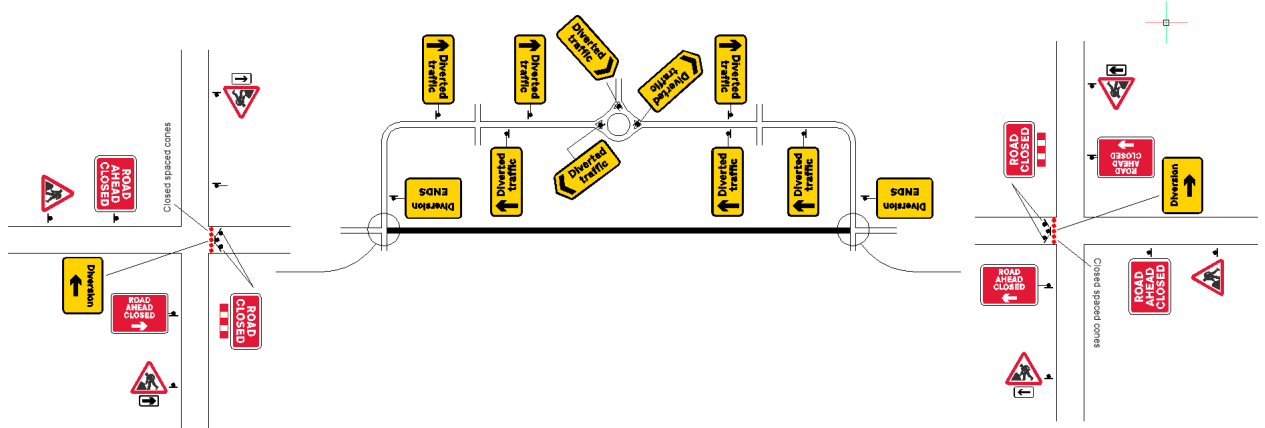
Advanced Individual Sign Schedule

The Sign Scheduler will count primary blocks (CONESOFTWARE signs) and nested blocks (CONESOFTWARE signs) nested within other blocks

Example: If you insert a sign via the Sign Search Browse & Insert tool or via the Ribbon or Toolbar then these will always be Primary signs. If you insert a schematic diagram block or a TSAM diagram and do not choose to explode the block or TSAM on insert then the signs contained within the schematic diagram block or TSAM will be nested signs one level deep

All CONE 12 primary signs will have a block name prefixed with "CPT", all older CONE signs will have block name prefixed with "CP"

The diagram below is used to illustrate the **Simple Quantified** and **Advanced Quantified** sign schedules



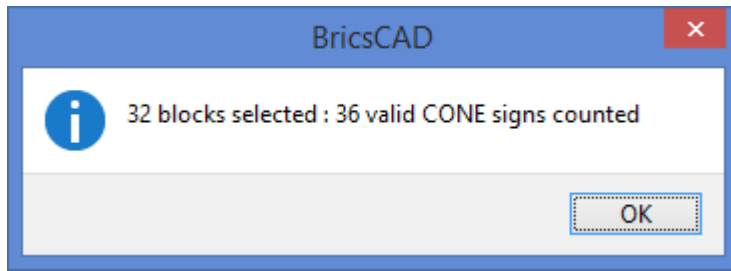
The Simple Quantified Sign Schedule is a direct replacement for the sign scheduler tool provided in older versions of CONE and will create a quantified list of signs complete with Reference, Description and an Image of the sign

Command: CUKSIMPLESCHEDULE

Select signs <Any Method> to include in this schedule

Select entities:

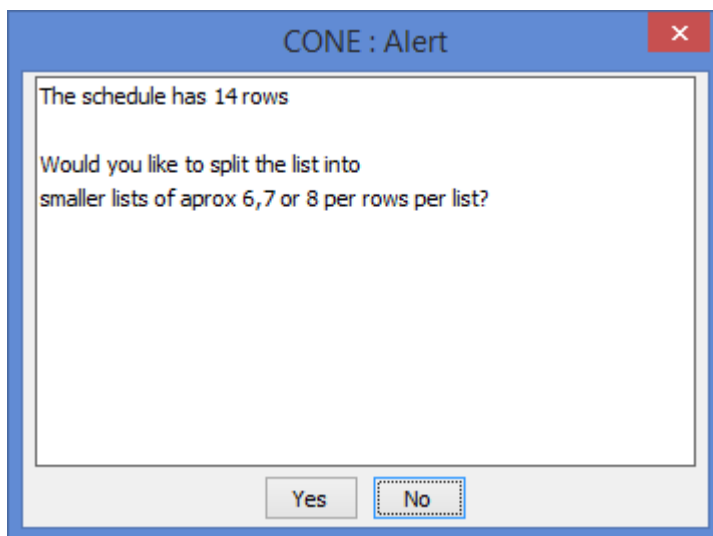
Use any CAD method to select signs and press the **Enter** key after selecting



Assuming you have selected some valid CONE signs the tool will respond with a message similar to this:

When the number of blocks selected does not match the number of signs counted this is usually due to one or more of the selected signs having a QTY attribute greater than one

Select the **OK** button to dismiss the message



If there are more than 11 lines in the output you will be presented with the opportunity to split the lists into smaller lists of 6,7 or 8 rows per list

Select **Yes** or **No** to continue

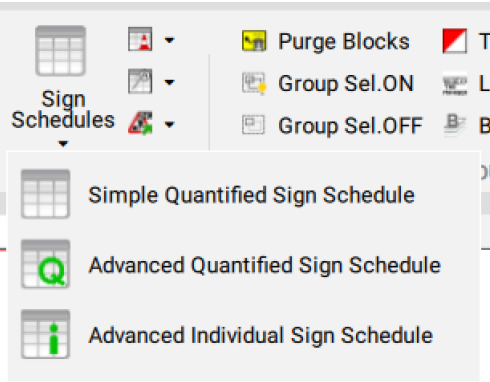
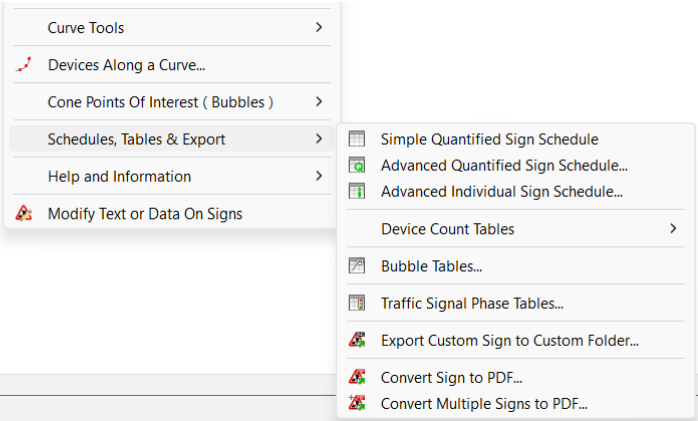
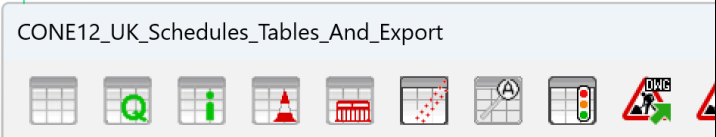
The schedule table will be created on the current layer and will inherit the current colour setting, you will be prompted to pick the position of the top left corner of the table on your drawing

Note: The simple scheduler always uses a text height of 1, if you would like the table to be larger or smaller use the CAD Scale tool

The diagram below is an example of a simple schedule table created for the diagram on the previous page

Qty: 2 Ref: 2702 End of temporary diversion route		Qty: 2 Ref: 573 Direction to hazard right	
Qty: 1 Ref: 2702 Start of temporary diversion route left		Qty: 6 Ref: 7001 Road works ahead	
Qty: 1 Ref: 2702 Start of temporary diversion route right		Qty: 4 Ref: 7010.1 Nature of temporary hazard ahead - Road Closed	
Qty: 6 Ref: 2703 Direction of temporary diversion route from junction ahead		Qty: 2 Ref: 7010.1 Nature of temporary hazard ahead - Road Ahead Closed	
Qty: 2 Ref: 2704 Direction of temporary diversion route left		Qty: 4 Ref: 7105 Lane closure barrier	
Qty: 1 Ref: 2704 Direction of temporary diversion route right		Qty: 1 Ref: RACL Schedule 13-9 : Road Ahead Closed Left	
Qty: 2 Ref: 573 Direction to hazard left		Qty: 2 Ref: RACR Schedule 13-9 : Road Ahead Closed Right	

Schedules Tables & Export - Advanced Quantified Sign Schedule

Command: CUKADVANCEDQTYSCCHEDULE RIBBON: CONE12 Misc Sign Schedules	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Schedules_Tables_And_Export	

DIALOG BOX:

The Advanced Quantified Sign Scheduler will count signs in a similar way to the Simple Quantified Sign Scheduler but offers much more

The list is presented in a dialog prior to insertion of the schedule table

Item numbers ID's can be included in the schedule table

Item numbers ID's can be inserted next to the signs on the drawing

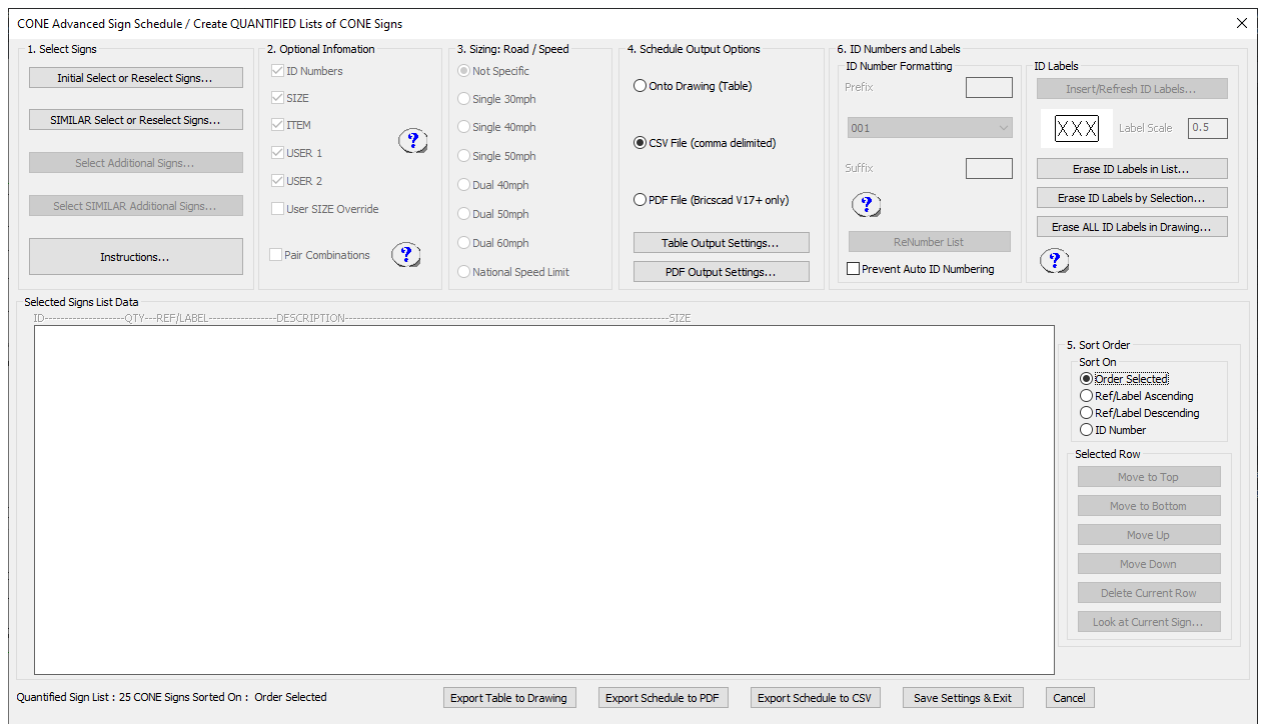
The size of the signs can be included in the schedule table

The order of the output lines can be changed

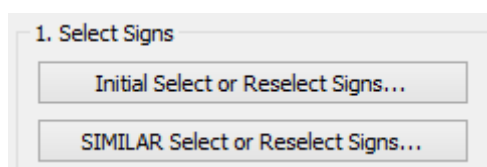
The table can be output to drawing, CSV file or direct to PDF

Command: CUKADVANCEDQTYSCCHEDULE

A dialog will load and the list will initially be empty



Selecting signs on your drawing:



The **[Initial Select or Reselect Signs]** button is used to select the signs to include

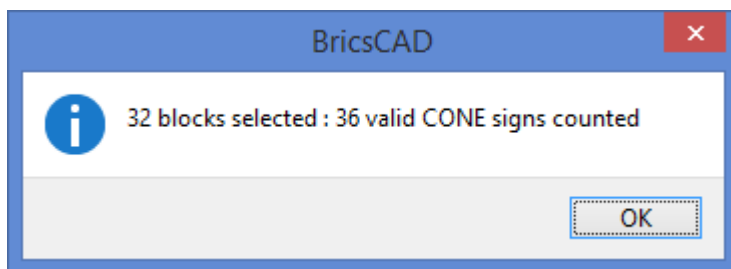
The **[SIMILAR Select or Reselect Signs]** button could also be used, this tool will only select SIMILAR signs with the same block name as the first chosen sign, or signs that reside on the same layer or both block name or layer

The dialog will be temporarily hidden and the command line prompt will show

Command: Select signs <Any Method> to include in this schedule

Command: Select entities:

Use any CAD method to select signs and press the **Enter** key after selecting



Assuming you have selected some valid CONE signs the tool will respond with a message similar to this:

When the number of blocks selected does not match the number of signs counted this is usually due to one or more of the selected signs having a QTY attribute greater than one

Select the **OK** button to continue and the dialog will reload and show a list of signs

CONE Advanced Sign Schedule / Create QUANTIFIED Lists of CONE Signs

1. Select Signs

Initial Select or Reselect Signs...

SIMILAR Select or Reselect Signs...

Select Additional Signs...

Select SIMILAR Additional Signs...

Instructions...

2. Optional Information

☒ ID Numbers

☒ SIZE

☐ ITEM

☐ USER 1

☐ USER 2

☐ User SIZE Override

☐ Pair Combinations

3. Sizing: Road / Speed

☐ Not Specific

☒ Single 30mph

☐ Single 40mph

☐ Single 50mph

☐ Dual 40mph

☐ Dual 50mph

☐ Dual 60mph

☐ National Speed Limit

4. Schedule Output Options

☒ Onto Drawing (Table)

☐ CSV File (comma delimited)

☐ PDF File (Bricscad V17+ only)

Table Output Settings...

PDF Output Settings...

6. ID Numbers and Labels

ID Number Formatting

Prefix: 001

Suffix:

ReNumber List

☐ Prevent Auto ID Numbering

ID Labels

Insert/Refresh ID Labels...

Label Scale: 0.5

Erase ID Labels in List...

Erase ID Labels by Selection...

Erase ALL ID Labels in Drawing...

Selected Signs List Data

ID	QTY	REF/LABEL	DESCRIPTION	SIZE
001	1	517	Road narrows on one side only ahead - right	600 High
002	3	645	End panel	359 x 234 @ 62.5 X-hgt
003	6	7001	Road works ahead	600 High
004	3	543	Traffic signals ahead	600 High
005	3	518	Single file traffic	737 x 359 @ 62.5 X-hgt
006	2	517	Road narrows on one side only ahead - left	600 High
007	3	7011.1	3 Way Control - Wait here until green light shows	1050 x 750
008	1	610	Keep left	600 Dia
009	1	7105	Lane closure barrier	1250 x 300
010	2	610	Keep right	600 Dia

5. Sort Order

Sort On

☒ Order Selected

☐ Ref/Label Ascending

☐ Ref/Label Descending

☐ ID Number

Selected Row

Move to Top

Move to Bottom

Move Up

Move Down

Delete Current Row

Look at Current Sign...

Quantified Sign List : 25 CONE Signs Sorted On : Order Selected

Export Table to Drawing Export Schedule to PDF Export Schedule to CSV Save Settings & Exit Cancel

After you have selected some signs then the [Select Additional Signs] and the [Select SIMILAR Additional Signs] buttons will be available

If none of the **Optional Information** check boxes are enabled the list will just include QTY,REF/LABEL and DESCRIPTION

2. Optional Information

☒ ID Numbers

☒ SIZE

☐ ITEM

☐ USER 1

☐ USER 2

☐ User SIZE Override

☐ Pair Combinations

Optional Information

ID Numbers: If this option is enabled each line will be assigned a ID Number based on the default **ID Number Formatting**

SIZE: If this option is enabled the size of the sign will be calculated and displayed in the list based on the Sizing: Road/Speed setting

ITEM:

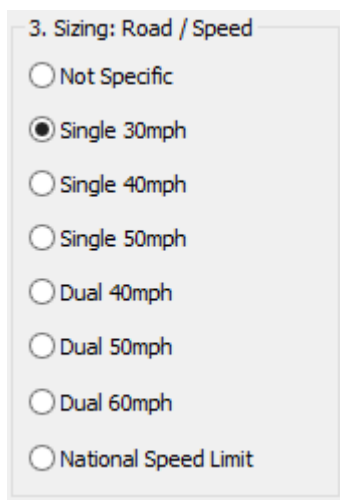
USER 1:

USER 2:

All CONE signs have additional attributes ITEM, USER1 and USER2. If any of the signs selected have values in these attributes and the options ITEM, USER1 or USER2 are enabled then the information will be included in the schedule table output

User SIZE Override: If this option is enabled and there is a value in the SIZE attribute of a sign then the user size will be displayed instead of the calculated size

Pair Combinations: This option is only available with the Advanced Individual Sign Schedule tool



3. Sizing: Road / Speed

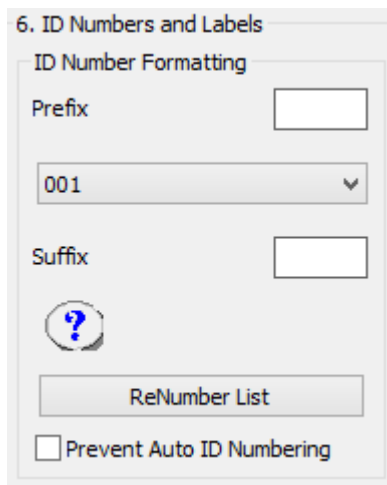
- ☐ Not Specific
- ☒ Single 30mph
- ☐ Single 40mph
- ☐ Single 50mph
- ☐ Dual 40mph
- ☐ Dual 50mph
- ☐ Dual 60mph
- ☐ National Speed Limit

Sizing: Road/Speed

If the Optional **SIZE** is enabled then the calculated size will be based upon the setting chosen here and will update the list accordingly.

If **Not Specific** is chosen then the size shown for signs with variable plate sizes will be based either 100 X-Height or will show a list of heights/diameters etc.

ID Numbers & Labels



6. ID Numbers and Labels

ID Number Formatting

Prefix

001 ▼

Suffix



ReNumber List

☐ Prevent Auto ID Numbering

If the **ID Numbers** option is enabled then each line in the list will be allocated a numeric value starting at number one

The format of the numeric value can be specified as 2,3,4 and 5 digit numbers (01, 001, 0001, 00001) by selecting from the pull down list

Optionally the numbers can have a prefix and/or a suffix. example: S001

Note: If the **Prevent Auto ID Numbering** checkbox is enabled the options described here will be disabled

The **Renumber List** button can be used to reset the ID labels numbers allocated to each line after changing the sort order and/or moving rows up and down



Insert/Refresh ID Labels

If you select the **Insert/Refresh ID Labels...** button then a special Bubble/Label will be inserted at the top left corner point of the signs on your drawing

The format of these special bubbles can be changed by successively clicking the bubble image icon and an **Label Scale** edit box is provided for specifying the Bubble/Label scale

Note: Some manual repositioning of the bubbles/labels on your drawing should be expected

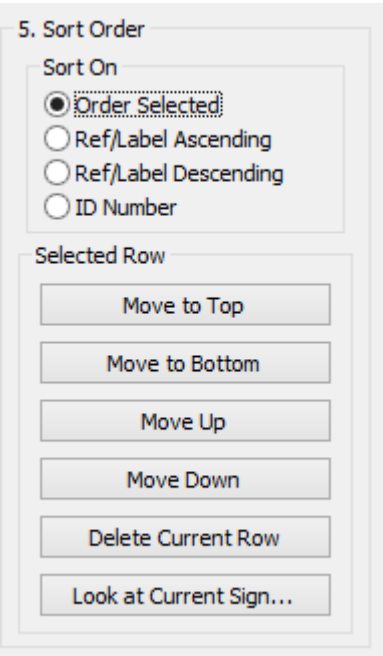
Erase ID Labels in List...

This button will erase from the drawing all Sign ID Bubble/Labels that correspond to the ID numbers in the list

Erase ID Labels by Selection...

This button will allow you to choose on your drawing which Sign ID Bubble/Labels to erase

Erase ALL ID Labels in Drawing...



This button will erase ALL Sign ID Bubble/Labels on your drawing

Sort Order

You can change the sorted order of the rows of signs in the list to suit your requirements

Order Selected: This will be fairly random if you selected the signs by window selection for example , but can be more precise if you select each sign in turn in the order required

Ref/Label Ascending: The sort order will be based on the alpha/numeric value in the REF/LABEL column

Ref/Label Descending: The sort order will be based on the reverse alpha/numeric value in the REF/LABEL column

ID Number: The sort order will be based on the ID column

In addition the current selected row can be moved **Up** and **Down** the list or moved to the **Top** or **Bottom**

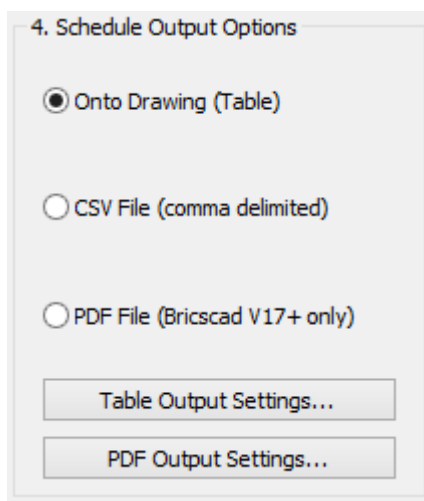
Note: After changing the sort order you may wish to pick the **Renumber List** button to re-allocate the ID numbers

Delete Current Row: Selecting this button will delete the current selected row in the list.

THIS IS IREVERSABLE and a warning will be issued if you select this button

Look at Current Sign: The dialog will be temporarily dismissed and a ZOOM will be performed around the sign selected, the Command prompt will show:

Command: Press any key except Esc to return to the dialog...



Schedule Output Options

Your schedule can be output as a table on the drawing to a CSV file (no sign images) or as a PDF file (Bricscad V17+ only)

Select the **Table Output Settings...** button to change the settings for table output onto drawing

Select the **PDF Output Settings...** button to change the settings used for PDF file export

Schedule Output to Table Options

Schedule Output to Table Options

Output schedule direct to Drawing

IMAGE	ID	ITEM	QTY	REF/LABEL
		DESCRIPTION		
		SIZE		
		LOCATION		
		USER 1		
		USER 2		

Fields in red are optional

Table Style

☒ 2 Column Left

☐ 2 Column Right

☐ 3 Column

Text Height

☐ Background Fill

Fill Colour 253

☒ Split Long Lists - X Rows per Table >

Optional Table Header

OK

The table can either be two column with the sign image on the left or right or three column where the sign image is in column two

The height of the text can be specified by entering a value in the **Text Height** edit box

Background Fill: If this option is enabled then the table will have a background fill equal to the colour chosen from the colour swatch

NOTE: This option is ignored if you are creating schedule tables using primitive objects
(See CONE User Preferences)

Split Long Lists: If this option is enabled then you can specify the maximum number of vertical rows in the output table by entering a value in the **X Rows per table>** edit box

Optional Table Header: Enter a value in the edit box if you wish to add a title to the tables

Schedule Output to PDF Options

CONE Sign Schedules / PDF Export Settings

Enter Schedule Header Details

Ref/Name/Quote

ABC123

Revision

1

Author

A.N. Other

Title

Various Custom Signs

Project

Major Event Festival

Client

Up North Show Ltd

Remarks1

Install W/B 08/09/17 - Remove 22/09/17

Remarks2

Enter Schedule Footer Details - Your Company Details

Company Name

CONE SOFTWARE

Address 1

The Heritage Exchange, Lindley, Huddersfield

Address 2

HD3 3HR - Tel 01484 489339

Various Options

☒ Include Current Dwg File Name in Header

☒ Include Todays Date in Header

☒ Include Item/Qty Summary in Header

Header Sheet Usage

☒ Include Header Sheet on First page only

☐ Include Header Sheet on ALL pages

Output Folder

C:\Users\Tony\Documents

....

OK

Cancel

PDF output consists of HEADER plus a two column output table and a FOOTER

The HEADER can appear on all pages or just the first page, the FOOTER appears on all pages

Both the header and footer consists of the fields show in the dialog above, and may be left blank if required

Various Options

Include Current Dwg File Name in the Header

Include Today's Date in the Header

Include Item/Qty Summary in the Header

Output Folder: You can specify where the PDF file is stored by clicking the button and selecting a folder on your PC

Select **OK** to save or **Cancel** to discard changes

Typical example of PDF output (first page only)

TITLE	Example Diversion Diagram	REF	ABC123
PROJECT	Resurfacing Works	AUTHOR	A.N. Other
CLIENT	AnyTown Council	REV	1
REMARKS	Install W/B 06/09/20 - Remove 15/09/20	DATE	07-01-2020
DWG NAME	C:\FINAL\ONE11TEST\HELP\DIVERSION_EXAMPLE.DWG	14 Items / Total Qty 36	

	ID: 001 Qty: 2 Ref: 2702 End of temporary diversion route Size: 1050 x 750
	ID: 002 Qty: 1 Ref: 2702 Start of temporary diversion route left Size: 1050 x 750
	ID: 003 Qty: 1 Ref: 2702 Start of temporary diversion route right Size: 1050 x 750
	ID: 004 Qty: 6 Ref: 2703 Direction of temporary diversion route from junction ahead Size: 770 x 353 @ 60 X-hgt
	ID: 005 Qty: 2 Ref: 2704 Direction of temporary diversion route left Size: 782 x 345 @ 60 X-hgt
	ID: 006 Qty: 1 Ref: 2704 Direction of temporary diversion route right Size: 782 x 345 @ 60 X-hgt
	ID: 007 Qty: 2 Ref: 573 Direction to hazard left Size: 600 x 400 @ 100 X-Hgt
	ID: 008 Qty: 2 Ref: 573 Direction to hazard right Size: 600 x 400 @ 100 X-Hgt
	ID: 009 Qty: 6 Ref: 7001 Road works ahead Size: 600 High

CONE SOFTWARE The Heritage Exchange, Lindley, Huddersfield HD3 3HR - Tel 01484 489339	SIGN SCHEDULE	SHEET 1 of 2

Export Table to Drawing

Select this button to create and insert the schedule table on your drawing

The schedule table will be created on the current layer and will inherit the current colour setting, you will be prompted to pick the position of the top left corner of the table on your drawing

;;----

Export Schedule to PDF

Select this button to create and export the schedule table to a PDF file

Note: The process involves creating temporary paper space layouts for each page complete with header and footer as specified all the pages are then published to a single PDF file, on very long lists this may take some time

You will be prompted to enter a file name for the pdf file which will be saved in the default folder as specified in the Schedule Output to PDF Options

At the end of the PDF creation process, the PDF file will be opened using your computers default Open with Application for PDF files.

The Schedule dialog WILL NOT reload at the end of the process

;;-----

Export Schedule to CSV file

A CSV is a comma-separated values file, which allows data to be saved in a tabular format.

CSV files can be used with most any spreadsheet program, such as Microsoft Excel or Google Spreadsheet

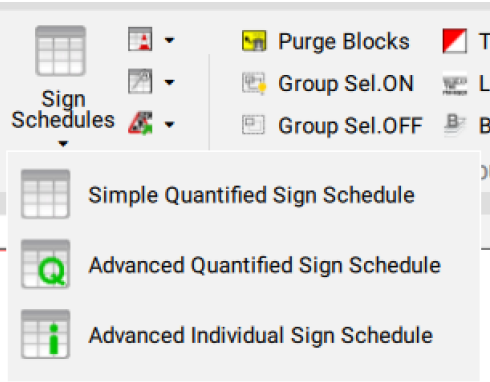
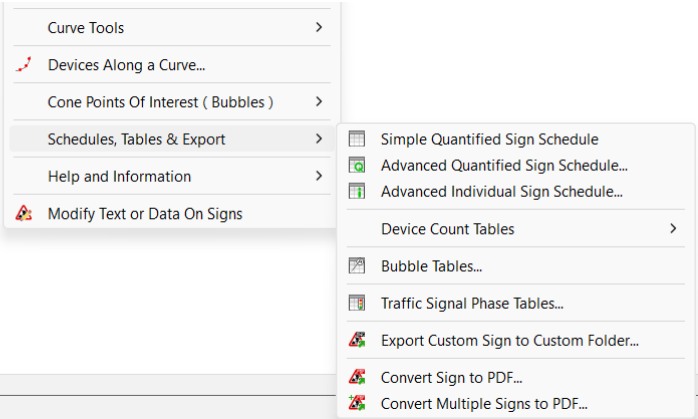
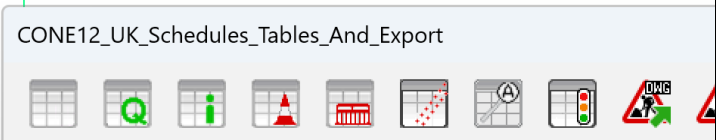
Note: It is not possible to export the sign image to CSV file

You will be prompted for a file name for the exported CSV file

At the end of the process your computers default application for CSV files will load the save file for your perusal

The Schedule dialog will also reload

Schedules Tables & Export - Advanced Individual Sign Schedule

Command: CUKADVANCEDINDIVIDUALSCHEDULE RIBBON: CONE12 Misc Sign Schedules	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Schedules_Tables_And_Export	

DIALOG BOX:

The Advanced Individual Sign Scheduler will count signs in a similar way to the Advanced Quantified Sign Scheduler but references each sign separately.

The list is presented in a dialog prior to insertion of the schedule table

Item numbers ID's can be included in the schedule table

Item numbers ID's can be inserted next to the signs on the drawing

Location references for each sign can be added to the schedule table

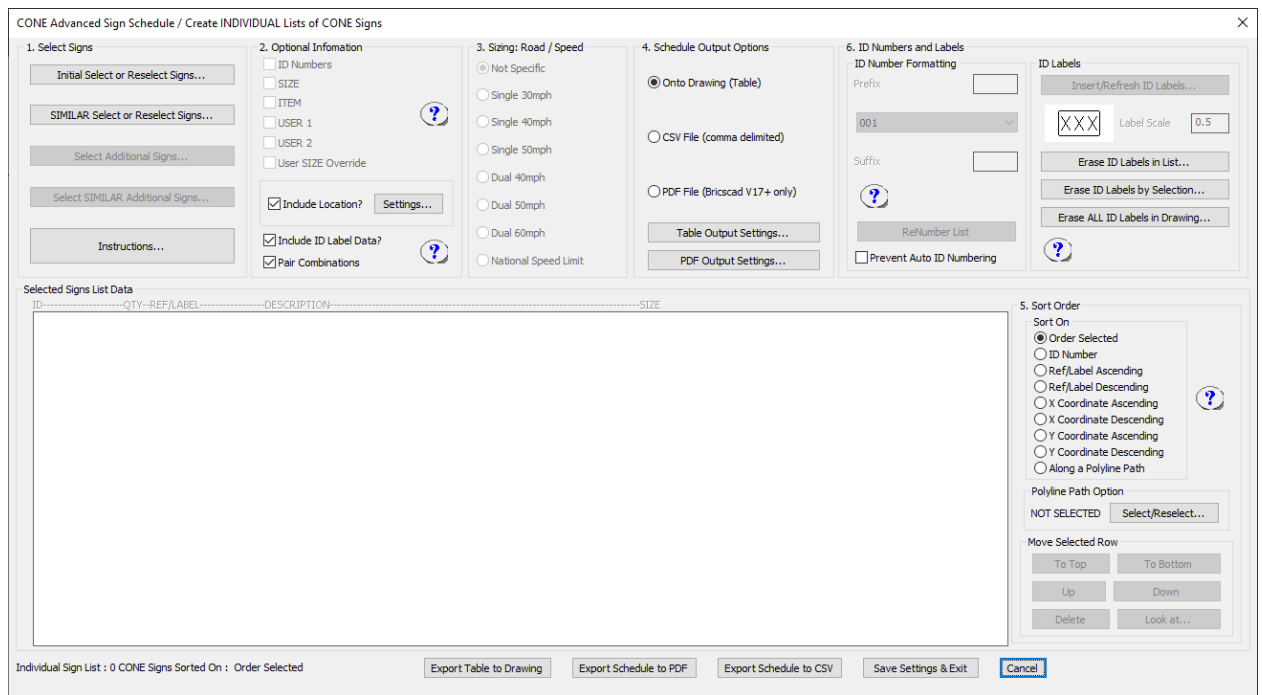
The size of the signs can be included in the schedule table

The order of the output lines can be changed

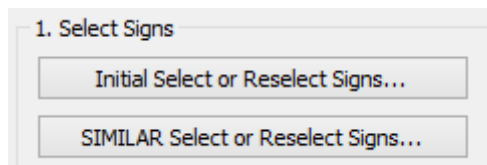
The table can be output to drawing, CSV file or direct to PDF

Command: CUKADVANCEDINDIVIDUALSCHEDULE

A dialog will load and the list will initially be empty



Selecting signs on your drawing:



The **[Initial Select or Reselect Signs]** button is used to select the signs to include

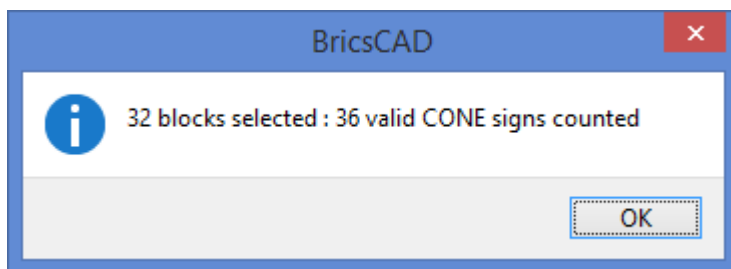
The **[SIMILAR Select or Reselect Signs]** button could also be used, this tool will only select SIMILAR signs with the same block name as the first chosen sign, or signs that reside on the same layer or both block name or layer

The dialog will be temporarily hidden and the command line prompt will show

Command: Select signs <Any Method> to include in this schedule

Command: Select entities:

Use any CAD method to select signs and press the **Enter** key after selecting



Assuming you have selected some valid CONE signs the tool will respond with a message similar to this:

When the number of blocks selected does not match the number of signs counted this is usually due to one or more of the selected signs having a QTY attribute greater than one

Select the **OK** button to continue and the dialog will reload and show a list of signs

1. Select Signs

Initial Select or Reselect Signs...

SIMILAR Select or Reselect Signs...

Select Additional Signs...

Select SIMILAR Additional Signs...

Instructions...

2. Optional Information

☒ ID Numbers
 ☒ SIZE
 ☐ ITEM
 ☐ USER 1
 ☐ USER 2
 ☐ User SIZE Override
 ☐ Pair Combinations

3. Sizing: Road / Speed

☐ Not Specific
 ☒ Single 30mph
 ☐ Single 40mph
 ☐ Single 50mph
 ☐ Dual 40mph
 ☐ Dual 50mph
 ☐ Dual 60mph
 ☐ National Speed Limit

4. Schedule Output Options

☒ Onto Drawing (Table)
 ☐ CSV File (comma delimited)
 ☐ PDF File (Bricscad V17+ only)

Table Output Settings...

PDF Output Settings...

5. ID Numbers and Labels

ID Number Formatting

Prefix

001

Suffix

ReNumber List

☐ Prevent Auto ID Numbering

ID Labels

Insert/Refresh ID Labels...

Label Scale 0.5

Erase ID Labels in List...

Erase ID Labels by Selection...

Erase ALL ID Labels in Drawing...

5. Sort Order

Sort On

☒ Order Selected
 ☐ Ref/Label Ascending
 ☐ Ref/Label Descending
 ☐ ID Number

Selected Row

Move to Top

Move to Bottom

Move Up

Move Down

Delete Current Row

Look at Current Sign...

Selected Signs List Data

ID	QTY	REF/LABEL	DESCRIPTION	SIZE
001	1	517	Road narrows on one side only ahead - right	600 High
002	3	645	End panel	359 x 234 @ 62.5 X-hgt
003	6	7001	Road works ahead	600 High
004	3	543	Traffic signals ahead	600 High
005	3	518	Single file traffic	737 x 359 @ 62.5 X-hgt
006	2	517	Road narrows on one side only ahead - left	600 High
007	3	7011.1	3 Way Control - Wait here until green light shows	1050 x 750
008	1	610	Keep left	600 Dia
009	1	7105	Lane closure barrier	1250 x 300
010	2	610	Keep right	600 Dia

Quantified Sign List : 25 CONE Signs Sorted On : Order Selected

Export Table to Drawing

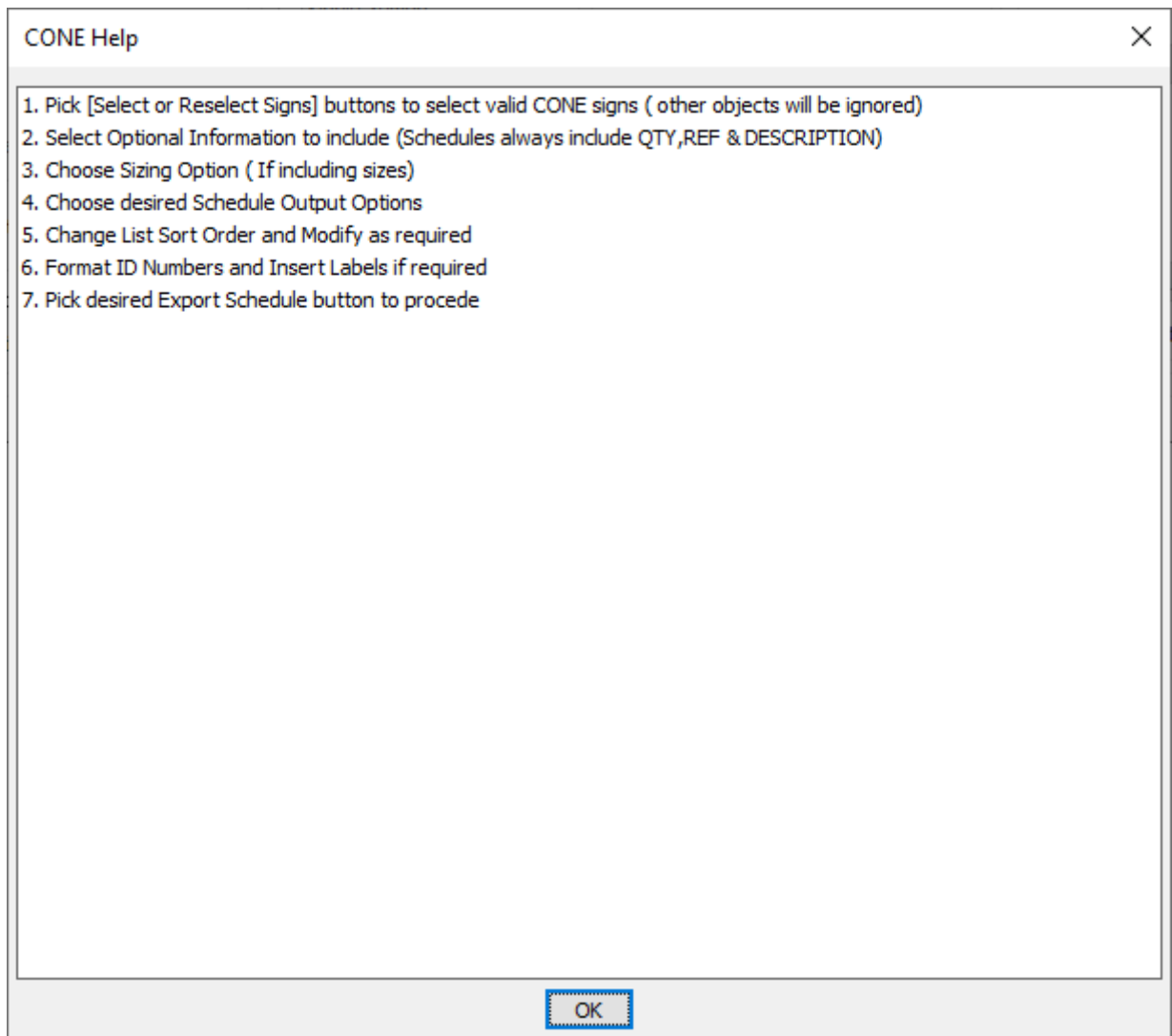
Export Schedule to PDF

Export Schedule to CSV

Save Settings & Exit

Cancel

The Instructions/Help button gives the following dialog help :



After you have selected some signs then the [Select Additional Signs] and the [Select SIMILAR Additional Signs] buttons will be available

If none of the **Optional Information** check boxes are enabled the list will just include QTY,REF/LABEL and DESCRIPTION

2. Optional Information

☒ ID Numbers

☒ SIZE

☐ ITEM

☐ USER 1

☐ USER 2

☐ User SIZE Override

☐ Include Location? [Settings...](#)

☒ Include ID Label Data?

☐ Pair Combinations

Optional Information

ID Numbers: If this option is enabled each line will be assigned a ID Number based on the default **ID Number Formatting**

SIZE: If this option is enabled the size of the sign will be calculated and displayed in the list based on the Sizing: Road/Speed setting

ITEM:

USER 1:

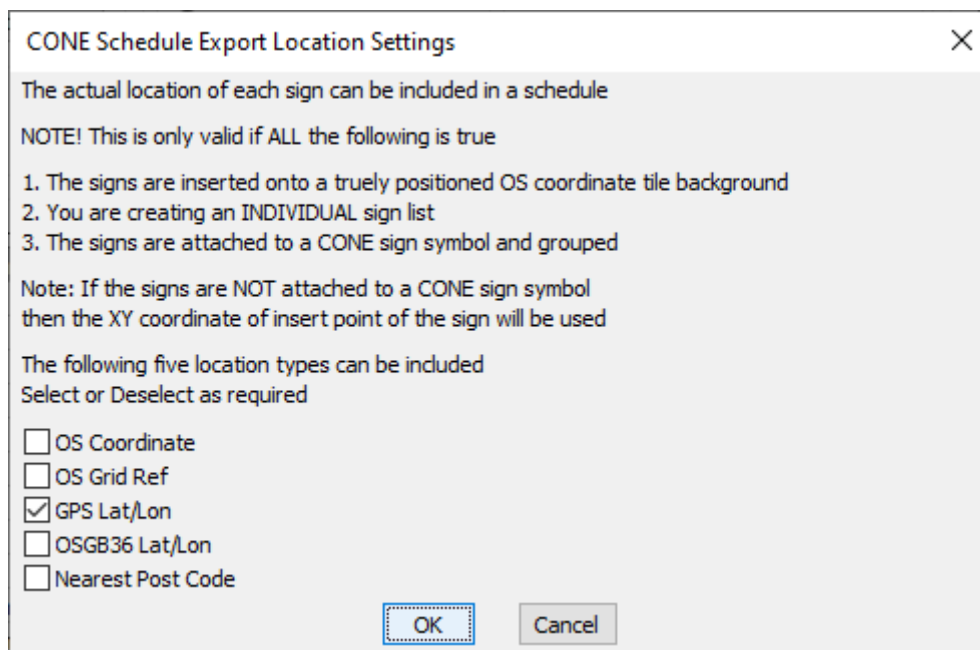
USER 2:

All CONE signs have additional attributes ITEM, USER1 and USER2. If any of the signs selected have values in these attributes and the options ITEM, USER1 or USER2 are enabled then the information will be included in the schedule table output

User SIZE Override: If this option is enabled and there is a value in the SIZE attribute of a sign then the user size will be displayed instead of the calculated size

Pair Combinations: This option is only available with the Advanced Individual Sign Schedule tool

Include Location:



You have the options to include one or more of the coordinate values in the schedule by checking against the boxes:

OS Coordinate

OS Grid Reference

GPS Latitude/Longitude

OSGB36 Latitude/Longitude

Nearest Post Code

3. Sizing: Road / Speed

- ☐ Not Specific
- ☒ Single 30mph
- ☐ Single 40mph
- ☐ Single 50mph
- ☐ Dual 40mph
- ☐ Dual 50mph
- ☐ Dual 60mph
- ☐ National Speed Limit

Sizing: Road/Speed

If the Optional **SIZE** is enabled then the calculated size will be based upon the setting chosen here and will update the list accordingly.

If **Not Specific** is chosen then the size shown for signs with variable plate sizes will be based either 100 X-Height or will show a list of heights/diameters etc.

ID Numbers & Labels

6. ID Numbers and Labels

ID Number Formatting

Prefix

001 ▼

Suffix

ReNumber List

☐ Prevent Auto ID Numbering

If the **ID Numbers** option is enabled then each line in the list will be allocated a numeric value starting at number one

The format of the numeric value can be specified as 2,3,4 and 5 digit numbers (01, 001, 0001, 00001) by selecting from the pull down list

Optionally the numbers can have a prefix and/or a suffix. example: S001

Note: If the **Prevent Auto ID Numbering** checkbox is enabled the options described here will be disabled

The **Renumber List** button can be used to reset the ID labels numbers allocated to each line after changing the sort order and/or moving rows up and down



Insert/Refresh ID Labels

If you select the **Insert/Refresh ID Labels...** button then a special Bubble/Label will be inserted at the top left corner point of the signs on your drawing

The format of these special bubbles can be changed by successively clicking the bubble image icon and an **Label Scale** edit box is provided for specifying the Bubble/Label scale

Note: Some manual repositioning of the bubbles/labels on your drawing should be expected

Erase ID Labels in List...

This button will erase from the drawing all Sign ID Bubble/Labels that correspond to the ID numbers in the list

Erase ID Labels by Selection...

This button will allow you to choose on your drawing which Sign ID Bubble/Labels to erase

Erase ALL ID Labels in Drawing...

5. Sort Order

Sort On

☒ Order Selected

☐ Ref/Label Ascending

☐ Ref/Label Descending

☐ ID Number

Selected Row

Move to Top

Move to Bottom

Move Up

Move Down

Delete Current Row

Look at Current Sign...

This button will erase ALL Sign ID Bubble/Labels on your drawing

Sort Order

You can change the sorted order of the rows of signs in the list to suit your requirements

Order Selected: This will be fairly random if you selected the signs by window selection for example , but can be more precise if you select each sign in turn in the order required

Ref/Label Ascending: The sort order will be based on the alpha/numeric value in the REF/LABEL column

Ref/Label Descending: The sort order will be based on the reverse alpha/numeric value in the REF/LABEL column

ID Number: The sort order will be based on the ID column

In addition the current selected row can be moved **Up** and **Down** the list or moved to the **Top** or **Bottom**

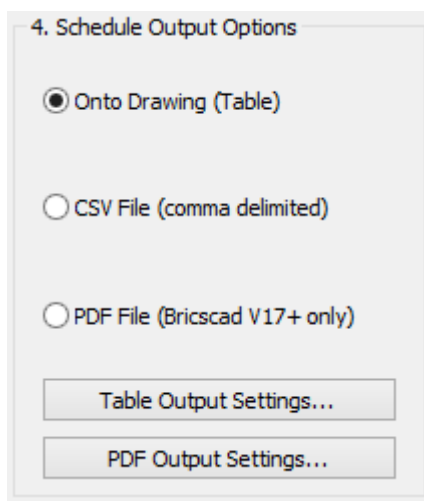
Note: After changing the sort order you may wish to pick the **Renumber List** button to re-allocate the ID numbers

Delete Current Row: Selecting this button will delete the current selected row in the list.

THIS IS IREVERSABLE and a warning will be issued if you select this button

Look at Current Sign: The dialog will be temporarily dismissed and a ZOOM will be performed around the sign selected, the Command prompt will show:

Command: Press any key except Esc to return to the dialog...



Schedule Output Options

Your schedule can be output as a table on the drawing to a CSV file (no sign images) or as a PDF file (Bricscad V17+ only)

Select the **Table Output Settings...** button to change the settings for table output onto drawing

Select the **PDF Output Settings...** button to change the settings used for PDF file export

Schedule Output to Table Options

Schedule Output to Table Options

Output schedule direct to Drawing

IMAGE

ID	ITEM	QTY	REF/LABEL
DESCRIPTION			
SIZE			
LOCATION			
USER 1			
USER 2			

Fields in red are optional

Table Style

☒ 2 Column Left

☐ 2 Column Right

☐ 3 Column

Text Height

2.5

☐ Background Fill

Fill Colour

253

☒ Split Long Lists - X Rows per Table >

12

Optional Table Header

Sign Schedule

OK

The table can either be two column with the sign image on the left or right or three column where the sign image is in column two

The height of the text can be specified by entering a value in the **Text Height** edit box

Background Fill: If this option is enabled then the table will have a background fill equal to the colour chosen from the colour swatch

NOTE: This option is ignored if you are creating schedule tables using primitive objects
(See CONE User Preferences)

Split Long Lists: If this option is enabled then you can specify the maximum number of vertical rows in the output table by entering a value in the **X Rows per table>** edit box

Optional Table Header: Enter a value in the edit box if you wish to add a title to the tables

Schedule Output to PDF Options

CONE Sign Schedules / PDF Export Settings

Enter Schedule Header Details

Ref/Name/Quote

ABC123

Revision

1

Author

A.N. Other

Title

Various Custom Signs

Project

Major Event Festival

Client

Up North Show Ltd

Remarks1

Install W/B 08/09/17 - Remove 22/09/17

Remarks2

Enter Schedule Footer Details - Your Company Details

Company Name

CONE SOFTWARE

Address 1

The Heritage Exchange, Lindley, Huddersfield

Address 2

HD3 3HR - Tel 01484 489339

Various Options

☒ Include Current Dwg File Name in Header

☒ Include Todays Date in Header

☒ Include Item/Qty Summary in Header

Header Sheet Usage

☒ Include Header Sheet on First page only

☐ Include Header Sheet on ALL pages

Output Folder

C:\Users\Tony\Documents

....

OK

Cancel

PDF output consists of HEADER plus a two column output table and a FOOTER

The HEADER can appear on all pages or just the first page, the FOOTER appears on all pages

Both the header and footer consists of the fields show in the dialog above, and may be left blank if required

Various Options

Include Current Dwg File Name in the Header

Include Today's Date in the Header

Include Item/Qty Summary in the Header

Output Folder: You can specify where the PDF file is stored by clicking the button and selecting a folder on your PC

Select **OK** to save or **Cancel** to discard changes

Typical example of PDF output (first page only)

TITLE	Various Custom Signs	REF	ABC123
PROJECT	Major Event Festival	AUTHOR	A.N. Other
CLIENT	Up North Show Ltd	REV	1
REMARKS	Install W/B 08/09/17 - Remove 22/09/17	DATE	07-10-2021
DWG NAME	D:\DOCUMENTS\CADAPTOR SOLUTIONS\ONE TRAINING\SESSION 5\DEMO-MAP-JC-COMplete.DWG		
		25 Items / Total Qty 25	

ID: 001 Qty: 1 Ref: 610 Keep right Size: 600 Dia OS Coord: 188.75 , 82.8 OS Grid Ref: SV188082 WSG84 [GPS] Lat/Lon : N: 49.767674 E: -7.554636	
ID: 002 Qty: 1 Ref: 7105 Lane closure barrier Size: 1250 x 300 OS Coord: 185.51 , 81.19 OS Grid Ref: SV185081 WSG84 [GPS] Lat/Lon : N: 49.767657 E: -7.554679	
ID: 003 Qty: 1 Ref: 610 Keep right Size: 600 Dia OS Coord: 185.51 , 81.19 OS Grid Ref: SV185081 WSG84 [GPS] Lat/Lon : N: 49.767657 E: -7.554679	
ID: 004 Qty: 1 Ref: 610 Keep left Size: 600 Dia OS Coord: 203.98 , 63.88 OS Grid Ref: SV203083 WSG84 [GPS] Lat/Lon : N: 49.767515 E: -7.554406	
ID: 005 Qty: 1 Ref: 7011.1 3 Way Control - Wait here until green light shows Size: 1050 x 750 OS Coord: 146.74 , 66.01 OS Grid Ref: SV146086 WSG84 [GPS] Lat/Lon : N: 49.767496 E: -7.555199	
ID: 006 Qty: 1 Ref: 518 Single file traffic Size: 737 x 359 @ 62.5 X-hgt OS Coord: 136.77 , 64.28 OS Grid Ref: SV136084 WSG84 [GPS] Lat/Lon : N: 49.767474 E: -7.555336	
ID: 007 Qty: 1 Ref: 517 Road narrows on one side only ahead - left Size: 600 High OS Coord: 136.77 , 64.28 OS Grid Ref: SV136084 WSG84 [GPS] Lat/Lon : N: 49.767474 E: -7.555336	
ID: 008 Qty: 1 Ref: 543 Traffic signals ahead Size: 600 High OS Coord: 126.93 , 62.59 OS Grid Ref: SV126062 WSG84 [GPS] Lat/Lon : N: 49.767452 E: -7.55547	

CONE SOFTWARE The Heritage Exchange, Lindley, Huddersfield HD3 3HR - Tel 01484 489339	SIGN SCHEDULE	SHEET 1 of 4

Export Table to Drawing

Select this button to create and insert the schedule table on your drawing

The schedule table will be created on the current layer and will inherit the current colour setting, you will be prompted to pick the position of the top left corner of the table on your drawing

The Advanced Individual Schedule is shown on the RIGHT compared to the Advanced Quantified schedule on the LEFT

Sign Selection		Sign Selection		Sign Selection			
001	 Qty: 1 - Ref 517 Road narrow in one side only ahead - right Road 505 194g	007	 Qty: 1 - Ref 510 Road narrow in one side only ahead - left Road 505 194g	013	 Qty: 1 - Ref 510 Road narrow in one side only ahead - left Road 505 194g	020	 Qty: 1 - Ref 510 Road narrow in one side only ahead - left Road 505 194g
002	 Qty: 3 - Ref 505 End Road 505 194g	008	 Qty: 3 - Ref 505 End Road 505 194g	014	 Qty: 3 - Ref 505 End Road 505 194g		
003	 Qty: 3 - Ref 7001 Road works ahead Road 505 194g	009	 Qty: 3 - Ref 7001 Road works ahead Road 505 194g	015	 Qty: 3 - Ref 7001 Road works ahead Road 505 194g		
004	 Qty: 3 - Ref 7001 Road works ahead Road 505 194g	010	 Qty: 3 - Ref 7001 Road works ahead Road 505 194g	016	 Qty: 3 - Ref 7001 Road works ahead Road 505 194g		
005	 Qty: 3 - Ref 510 Single file traffic Road 505 194g	011	 Qty: 3 - Ref 510 Single file traffic Road 505 194g	017	 Qty: 3 - Ref 510 Single file traffic Road 505 194g		
006	 Qty: 3 - Ref 517 Road narrow in one side only ahead - left Road 505 194g	012	 Qty: 3 - Ref 517 Road narrow in one side only ahead - left Road 505 194g	018	 Qty: 3 - Ref 517 Road narrow in one side only ahead - left Road 505 194g		
007	 Qty: 3 - Ref 517 Road narrow in one side only ahead - left Road 505 194g	013	 Qty: 3 - Ref 517 Road narrow in one side only ahead - left Road 505 194g	019	 Qty: 3 - Ref 517 Road narrow in one side only ahead - left Road 505 194g		
008	 Qty: 3 - Ref 510 Single file traffic Road 505 194g	014	 Qty: 3 - Ref 510 Single file traffic Road 505 194g	020	 Qty: 3 - Ref 510 Single file traffic Road 505 194g		
009	 Qty: 3 - Ref 510 Single file traffic Road 505 194g	015	 Qty: 3 - Ref 510 Single file traffic Road 505 194g	021	 Qty: 3 - Ref 510 Single file traffic Road 505 194g		
010	 Qty: 3 - Ref 510 Single file traffic Road 505 194g	016	 Qty: 3 - Ref 510 Single file traffic Road 505 194g	022	 Qty: 3 - Ref 510 Single file traffic Road 505 194g		
011	 Qty: 3 - Ref 510 Single file traffic Road 505 194g	017	 Qty: 3 - Ref 510 Single file traffic Road 505 194g	023	 Qty: 3 - Ref 510 Single file traffic Road 505 194g		
012	 Qty: 3 - Ref 510 Single file traffic Road 505 194g	018	 Qty: 3 - Ref 510 Single file traffic Road 505 194g	024	 Qty: 3 - Ref 510 Single file traffic Road 505 194g		

enlarged detail of schedule tables:

Sign Schedule		
001		Qty: 1 Ref: 517 Road narrows on one side only ahead - right Size: 600 High
002		Qty: 3 Ref: 645 End panel Size: 359 x 234 @ 62.5 X-hgt
003		Qty: 6 Ref: 7001 Road works ahead Size: 600 High
004		Qty: 3 Ref: 543 Traffic signals ahead Size: 600 High

Sign Schedule		
001		Qty: 1 Ref: 610 Keep right Size: 600 Dia OS Coord: 188.75, 82.8 OS Grid Ref: SV188082 WSG84 [GPS] Lat/Lon : N: 49.767674 E: -7.554636
002		Qty: 1 Ref: 7105 Lane closure barrier Size: 1250 x 300 OS Coord: 185.51, 81.19 OS Grid Ref: SV185081 WSG84 [GPS] Lat/Lon : N: 49.767657 E: -7.554679
003		Qty: 1 Ref: 610 Keep right Size: 600 Dia OS Coord: 185.51, 81.19 OS Grid Ref: SV185081 WSG84 [GPS] Lat/Lon : N: 49.767657 E: -7.554679

Export Schedule to PDF

Select this button to create and export the schedule table to a PDF file

Note: The process involves creating temporary paper space layouts for each page complete with header and footer as specified all the pages are then published to a single PDF file, on very long lists this may take some time

You will be prompted to enter a file name for the pdf file which will be saved in the default folder as specified in the Schedule Output to PDF Options

At the end of the PDF creation process, the PDF file will be opened using your computers default Open with Application for PDF files.

The Schedule dialog WILL NOT reload at the end of the process

„-----
”

Export Schedule to CSV file

A CSV is a comma-separated values file, which allows data to be saved in a tabular format.

CSV files can be used with most any spreadsheet program, such as Microsoft Excel or Google Spreadsheet

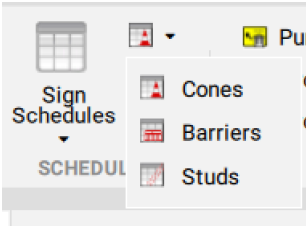
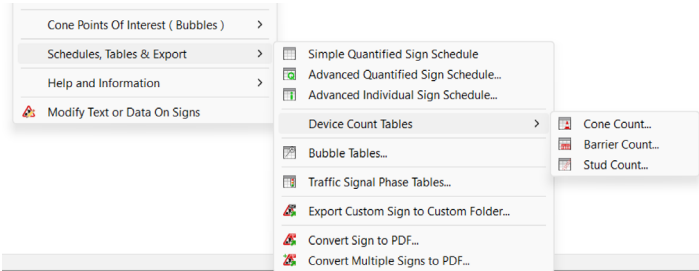
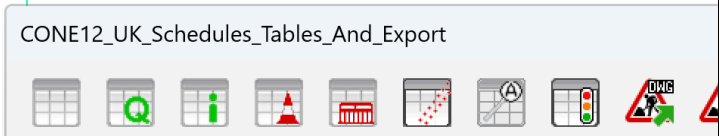
Note: It is not possible to export the sign image to CSV file

You will be prompted for a file name for the exported CSV file

At the end of the process your computers default application for CSV files will load the save file for your perusal

The Schedule dialog will also reload

Schedules Tables & Export - Device Count Tables - Cone Count

Command: CUKCONECOUNT RIBBON: CONE12 Misc SCHEDULES	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Schedules_Tables_And_Export	

DIALOG BOX:

CONE Sign Schedules / CONE Count Tool

This tool will count CONES created with the DEVICES ALONG A CURVE TOOL

The CONES selected can be either individual CONE SYMBOLS or LINETYPES

The tool will quantify the list based on the Item Only, Item + Layer, Item + Colour or Item + Layer + Colour

Each selected row's Item Description and Qty can be edited as required

A simple table can be inserted in the drawing by selecting the [Draw Table] Button

The table heading and text height can be changed as required

Each row in the list can be identified on the drawing by selecting and inserting the Bubble

To get started pick the [Select or Reselect Cones] Button and select CONES using any selection method

Quantify On

☐ Item Only

☐ Item & Layer

☐ Item & Colour

☒ Item & Layer & Colour

Default Item for new lists

1000 High Traffic Cones

Selected Row

Qty :

Item :

Colour

Layer

Insert Bubble



Bubble Leader

☒ With Leader

☐ No Leader

Scale

Table Settings

Header / Title Text Height ☐ Background Fill

Fill Colour

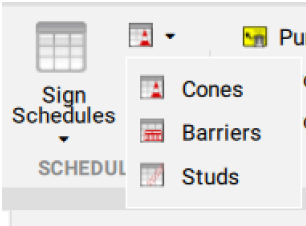
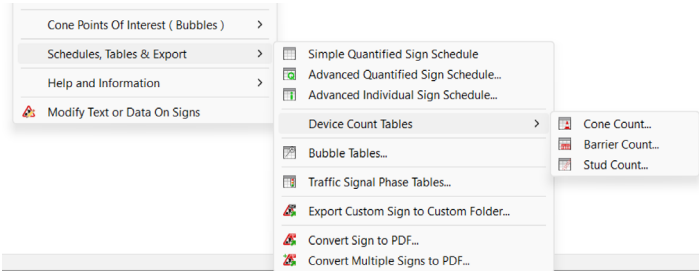
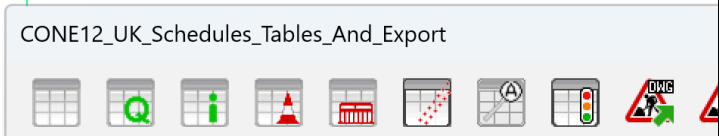
Select or Reselect Cones...

Draw Table

Cancel

Cone Count			
Qty	Item	Colour	Layer
75	1000 High Traffic Cones	1	CONESWORKSPACEANDDEVICES

Schedules Tables & Export - Device Count Tables - Barrier Count

Command: CUKDEVICECOUNT RIBBON: CONE12 Misc SCHEDULES	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Schedules_Tables_And_Export	

DIALOG BOX:

CONE Schedules / Device Count Tool

This tool will count Devices (Barriers & Fences) created with the DEVICES ALONG A CURVE TOOL

The devices can be either individual SYMBOLS or LINETYPES

The tool will quantify the list based on the Item Only (Barrier or Fence) or the Item and Layer the devices are placed on

Each selected row's Item Description and Qty can be edited as required

A simple table can be inserted in the drawing by selecting the [Draw Table] Button

The table heading and text height can be changed as required

Each row in the list can be identified on the drawing by selecting and inserting the appropriate Bubble

To get started pick the [Select or Reselect Button] and select devices using any selection method

Quantify On

☐ Item Only

☒ Item & Layer

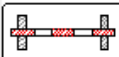
Selected Row

Qty :

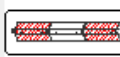
Item :

Layer :

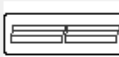
Insert Bubble



Plastic



Weighted



Metal or Concrete



Fence

Bubble Leader

☒ With Leader
 ☐ No Leader

Scale

Table Settings

Header / Title

Text Height

☐ Background Fill

Fill Colour

Select or Reselect Devices...

Draw Table

Cancel

Insert Bubble

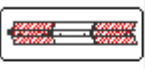
CONE 12 User Guide: Conesoftware.com July 7th 2026

379

Insert Bubble



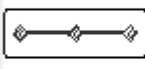
Plastic



Weighted



Metal or Concrete

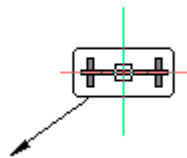


Fence

Bubble Leader

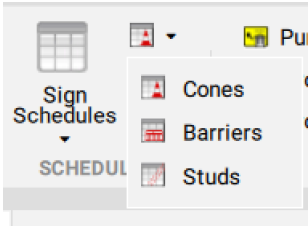
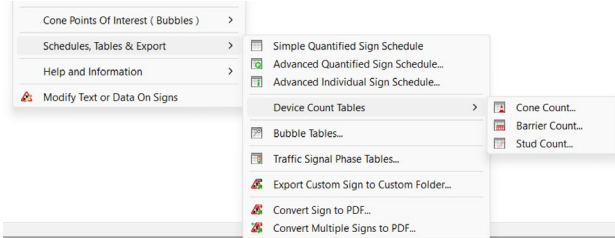
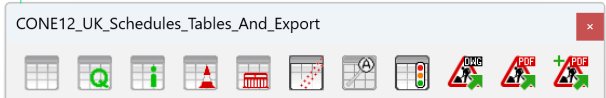
☒ With Leader
 ☐ No Leader

Scale



Device Count		
Qty	Item	Layer
29	Plastic Safety Barrier x 2.0 Metre Length	CONESWORKSPACEANDDEVICES

Schedules Tables & Export - Device Count Tables - Stud Count

Command: CUKSTUDCOUNT RIBBON: CONE12 Misc SCHEDULES	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Schedules_Tables_And_Export	

DIALOG BOX:

CONE Sign Schedules / STUD Count Tool

This tool will count STUDS created with the DEVICES ALONG A CURVE TOOL
The STUD selected can be either individual STUD SYMBOLS or STUD LINETYPES
The tool will quantify the list based on the Item Only, Item + Layer, Item + Colour or Item + Layer + Colour
Each selected row's Item Description and Qty can be edited as required
A simple table can be inserted in the drawing by selecting the [Draw Table] Button
The table heading and text height can be changed as required
Each row in the list can be identified on the drawing by selecting and inserting the Bubble
To get started pick the [Select or Reselect Studs] Button and select STUDS using any selection method

Quantify On

☐ Item Only

☐ Item & Layer

☐ Item & Colour

☒ Item & Layer & Colour

Default Item for new lists

Temporary Road Studs

Selected Row

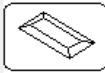
Qty :

Item :

Colour

Layer

Insert Bubble



Bubble Leader

☒ With Leader

☐ No Leader

Scale

1

Table Settings

Header / Title

Stud Count

Text Height

2.5

☐ Background Fill

Fill Colour

253

Select or Reselect Studs...

Draw Table

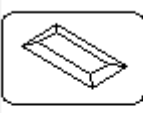
Cancel

Insert Bubble

CONE 12 User Guide: Conesoftware.com July 7th 2026

382

Insert Bubble

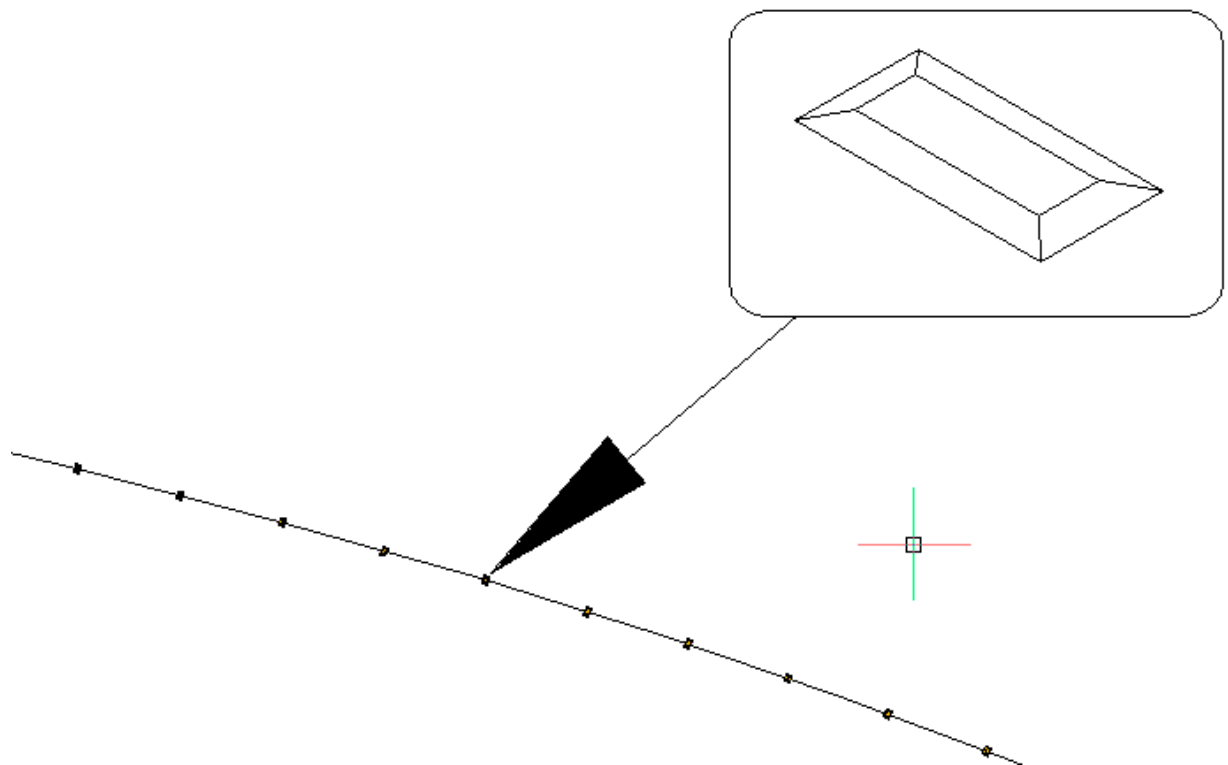


Bubble Leader

☒ With Leader
 ☐ No Leader

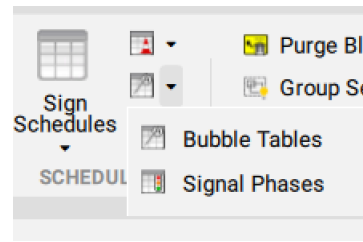
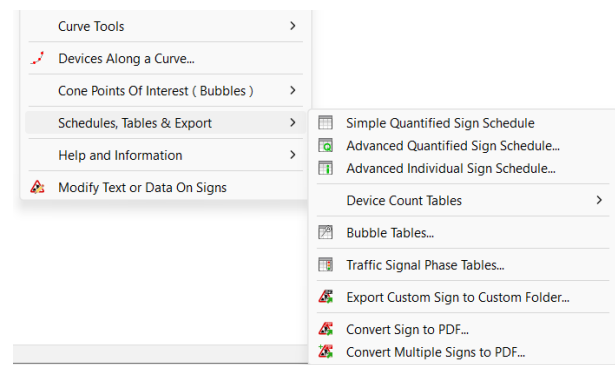
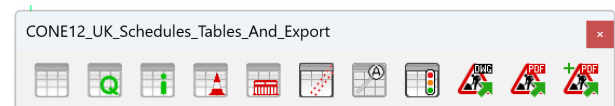
Scale

1



Stud Count			
Qty	Item	Colour	Layer
37	Temporary Road Studs	40	CONEWORKSPACEANDDEVICES

Schedules Tables & Export - Bubble Tables

Command: CUKBUBBLETABLES RIBBON: CONE12 Misc SCHEDULES	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Schedules_Tables_And_Export	

DIALOG BOX:

Create and Export Bubble Tables

×

There are no Bubble blocks currently selected, Please pick one of the Initial Selection buttons and select some Bubbles

View Bubble Schedule...

Initial Select / Reselect Bubbles

Select General...

Select Similar...

Select Similar in Window...

Add Bubbles To Selection

Add General...

Add Similar...

Remove Bubbles From Selection

Remove General...

Similar Match Criteria

☒ Layer Match

Bubble Name Match

☒ Exact
 ☐ Partial
 ☐ Any

Format TAG/HEADER

TAG | HEADER

Move Tag Order

Top

Bottom

Up

Down

Change Tag Header Text

Remove selected TAG/HEADER from List

Remove TAG/HEADER's with no value from List

Restore all TAG/HEADERS

Change Label Header Text

Label

Output the Bubble Schedule to

☒ Table in the drawing
 ☐ Excel Worksheet File
 ☐ Excel CSV File
 ☐ Tab Seperated Text File

File Export...

Table Output Options

Table Title

Text Hgt

2.5

☐ Background Fill

253

Show the Bubble Labels as

☒ Bubble Block Image
 ☐ Text

☒ Split Long Lists

Max rows per Table

6

Table Preview...

Draw Table & Exit

Cancel

Create and Export Bubble Tables

There are 9 Bubble blocks currently selected

If required pick one of the Initial/Add/Remove Selection buttons to amend your selection

The Bubble schedule contains the standard Label and Qty Fields (columns)

There are also one or more Bubble blocks that contain additional Fields (columns)

These additional Fields can be sorted / modified / removed by using the tools in the Format TAG/HEADER area

Pick the [View Bubble Schedule] button to inspect the schedule

View Bubble Schedule...

To create output choose the desired output format and change the various options as

For Tables pick the [Table Preview] or [Draw Table] buttons, for File output pick [File Export]

Initial Select / Reselect Bubbles

Select General...

Select Similar...

Select Similar in Window...

Add Bubbles To Selection

Add General...

Add Similar...

Remove Bubbles From Selection

Remove General...

Similar Match Criteria

☒ Layer Match

Bubble Name Match

☒ Exact
 ☐ Partial
 ☐ Any

Format TAG/HEADER

TAG | HEADER

REF | Ref

DES | Descpn

ID | ID

SIZE 1 | Size

SECTOR | Sector

LOCTN | Location

MOUNT | Mounting

RESOURCE | Resource

Move Tag Order

Top

Bottom

Up

Down

Change Tag Header Text

Ref

Remove selected TAG/HEADER from List

Remove TAG/HEADER's with no value from List

Restore all TAG/HEADERS

Change Label Header Text

Label

Output the Bubble Schedule to

☒ Table in the drawing
 ☐ Excel Worksheet File
 ☐ Excel CSV File
 ☐ Tab Separated Text File

File Export...

Table Output Options

Table Title

Text Hgt

2.5

Background Fill

253

Show the Bubble Labels as

☒ Bubble Block Image
 ☐ Text

☒ Split Long Lists
 Max rows per Table
 6

Table Preview...

Draw Table & Exit

Cancel

Format TAG/HEADER

TAG | HEADER

REF | Ref

DES | Descpn

ID | ID

SIZE 1 | Size

SECTOR | Sector

LOCTN | Location

MOUNT | Mounting

RESOURCE | Resource

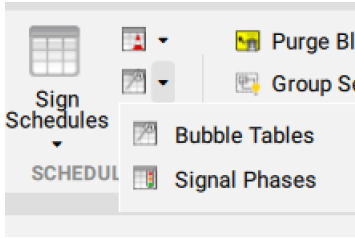
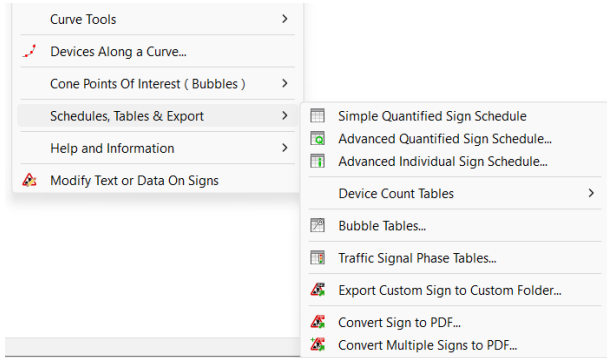
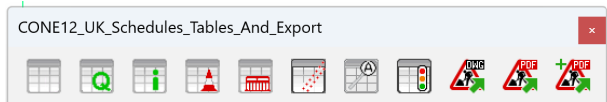
Mo

Output the Bubble Schedule to

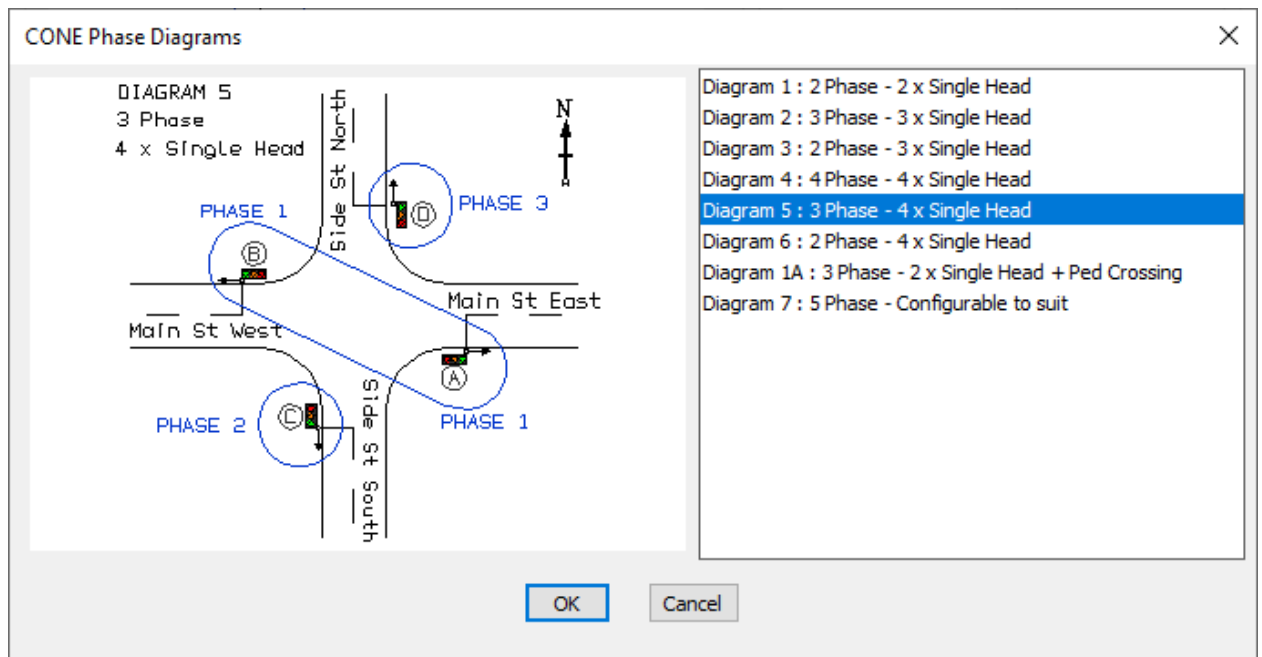
Qty	Label	Ref	Descpn	ID	Size	Sector	Location	Mounting	Resource	GPS Lat/Lon	Post Code
1		TONY									
1		PETER									
1		BEN									
1		NEIL									
1		MARTIN									
1		DAVID									

Qty	Label	Ref	Descpn	ID	Size	Sector	Location	Mounting	Resource	GPS Lat/Lon	Post Code
1		ALEX									
1		FRED									
1		MARK									

Schedules Tables & Export - Traffic Signal Phase Tables

Command: CUKPTSPHASETABLE1 RIBBON: CONE12 Misc SCHEDULES	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Schedules_Tables_And_Export	

DIALOG BOX:



Depending on the number of light heads and hence phases, the main dialog will change the number of lines to match the phases.

Although you can change the signal head letters and phase names they will not be updated in any diagrams inserted onto the drawing.

After editing the Max Green time, and location names of the signal heads, you can also edit the following lines for each table

Other Table Text

Table Header

Traffic Lights Phase Table

All Red Time (Optional)

MIN ALL RED - 5 SECS

Table Footer (Optional)

Optional Footer

Table Header: the single line of text that appears at the top of the phasing table NOTE: if this is left blank the header will be removed from the table

All Red Time : (Optional) The single line of text for the all red text in the table, NOTE: if this is left blank the line will be removed from the table

Table Footer : the single line of text that appears at the bottom of the phasing table NOTE: if this is left blank the footer will be removed from the table

Draw Table & Exit

When you click this button the program will draw a similar table to that shown below, you have the option of placing the table wherever you require it on the drawing.

All entries in the table are text entities, so can be edited using the usual CAD tools

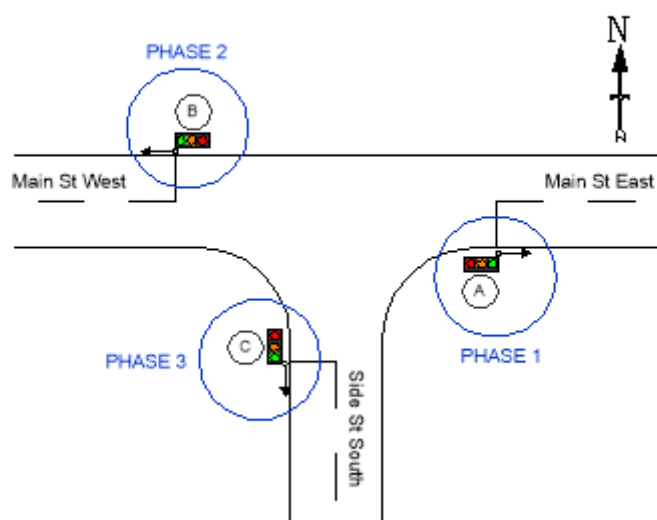
Header					
Phase	S.Head	T.Flow	Max Green	All Red	Location
1	A		35	5	Main St East
2	B		35	5	Main St West
3	C		35	5	Side St South
All Red					
Footer					

Insert Diagram (If Required),,,

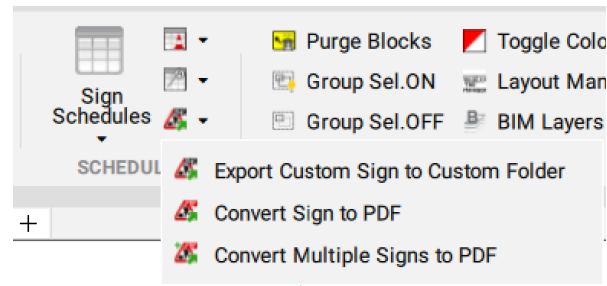
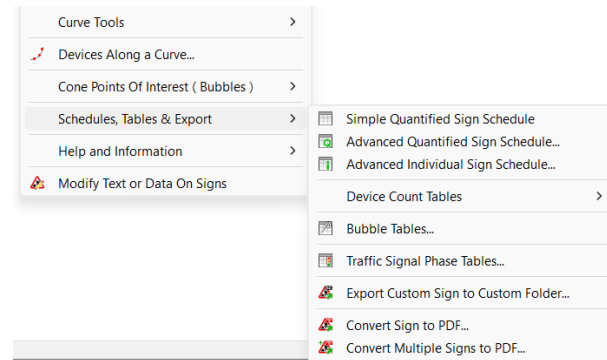
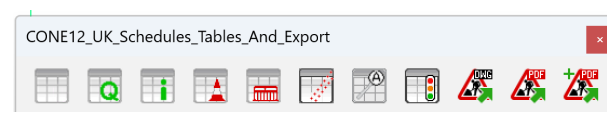
If you want a diagram of the light head layouts as well as the phasing table, select the button at the lower right of the dialog, the program will insert the diagram onto the drawing and allow you to position it where required.

All elements of the lighting layout diagram can be edited using normal CAD tools if required.

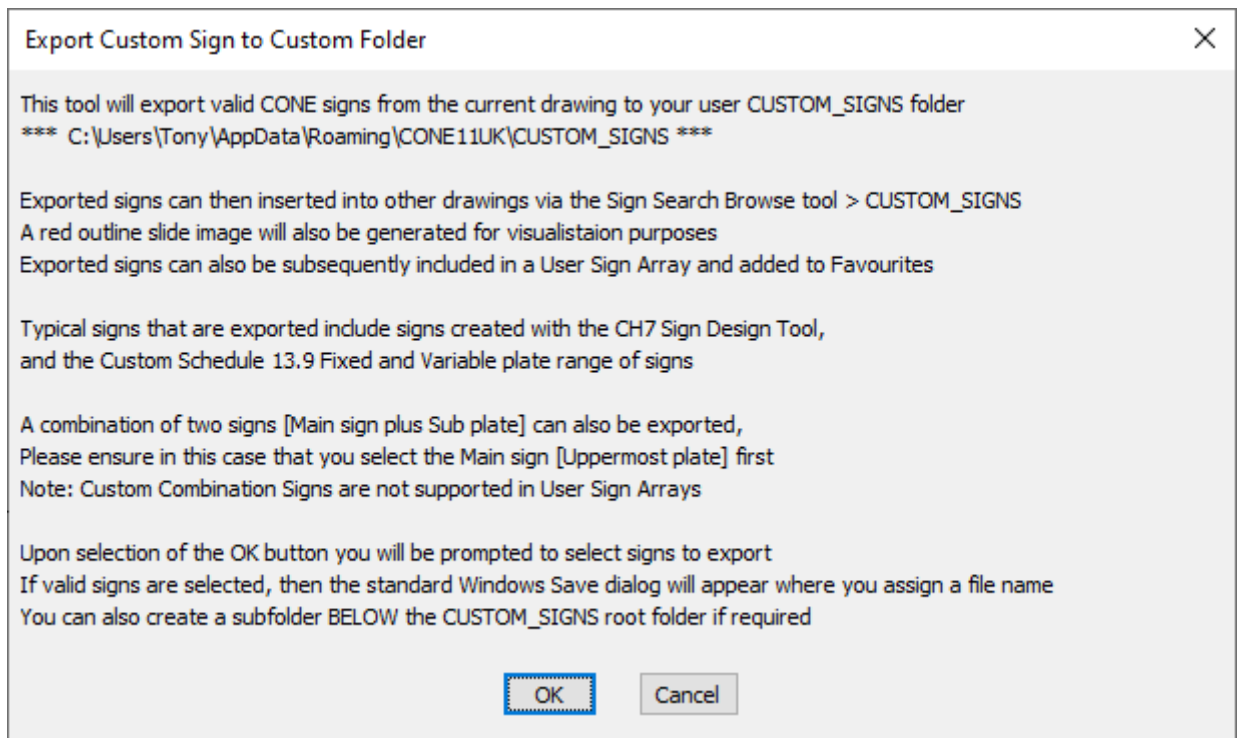
DIAGRAM 2 3 Phase: 3 x Single Head



Schedules Tables & Export - Export Custom Sign to Custom Folder

Command: CUKEXPORTCONESIGN RIBBON: CONE12 Misc SCHEDULES	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Schedules_Tables_And_Export	

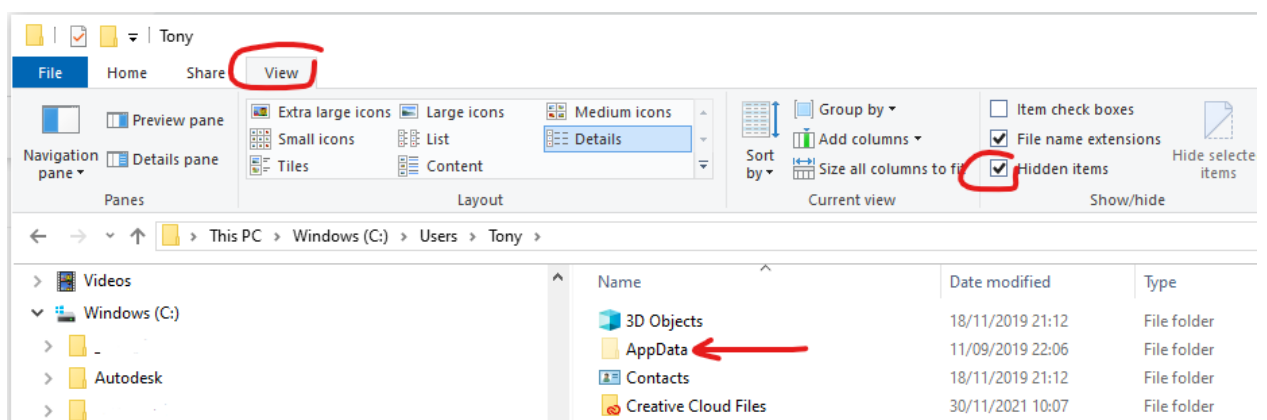
DIALOG BOX:



This tool will export valid CONE signs from the current drawing to your user CUSTOM_SIGNS folder

normally located : C:\Users\<login
 name>\AppData\Roaming\CONE11UK\CUSTOM_SIGNS

NOTE the AppData folder is a hidden folder, so you may not be able to browse to it without turning on the show "hidden items" option in the Windows File Explorer.



Exported signs can then be inserted into other drawings via the Sign Search Browse & Insert tool > CUSTOM_SIGNS

A red outline slide image will also be generated for visualisation purposes

Exported signs can also be subsequently included in a User Sign Array and added to Favourites

Typical signs that are exported include signs created with the CH7 Sign Design Tool, and the Custom Schedule 13.9 Fixed and Variable plate range of signs

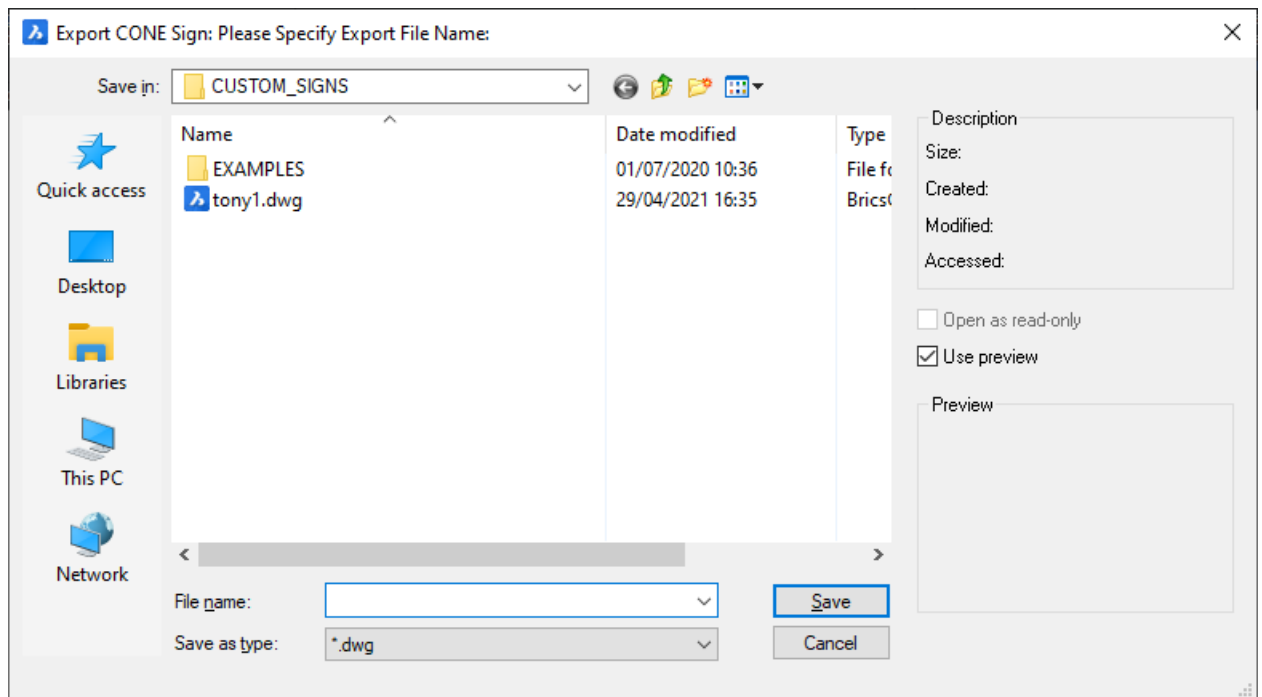
A combination of two signs (Main sign plus Sub plate) can also be exported, Please ensure in this case that you select the main sign (uppermost plate) first

NOTE: Custom Combination Signs are not supported in User Sign Arrays

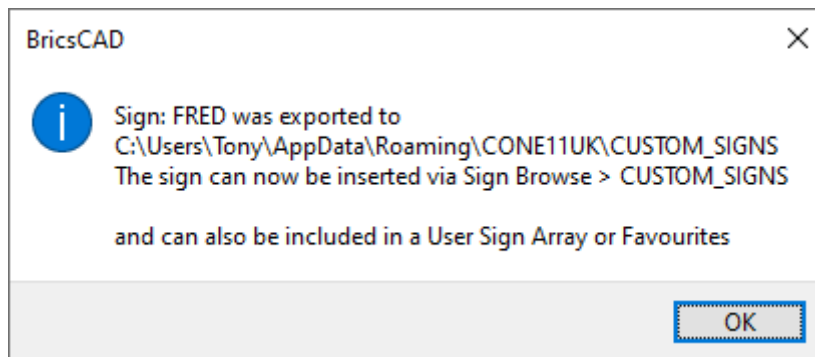
Upon selection of the OK button you will be prompted to select signs to export

If valid signs are selected, then the standard Windows SAVE dialog will appear where you assign a filename (see screen grab below)

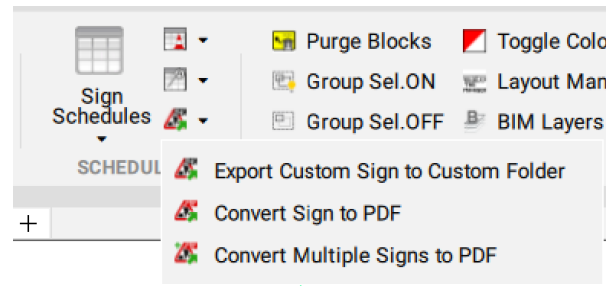
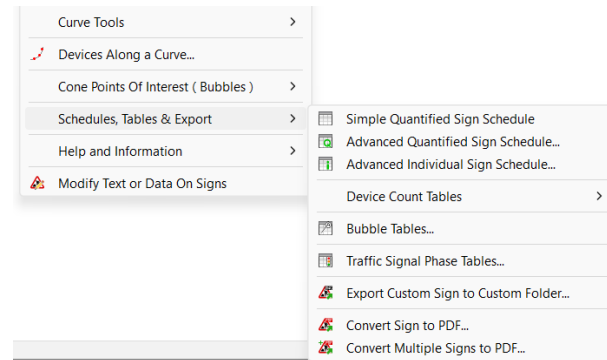
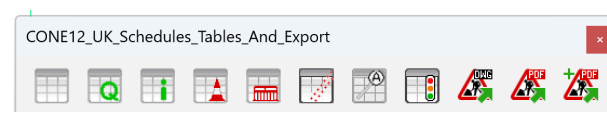
You can also create sub-folders BELOW the CUSTOM_SIGNS root folder if required.



After saving the files and creating the red outline preview image the program will display the following information dialog to remind you how to use the saved sign.



Schedules Tables & Export - Convert Sign to PDF

Command: CUKSIGN2PDF RIBBON: CONE12 Misc SCHEDULES	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Schedules_Tables_And_Export	

NOTE: THIS TOOL REQUIRES BRICSCAD IT IS NOT SUPPORTED IN AUTOCAD

NO DIALOG BOX:

The Convert Sign to PDF tool will ask you to select a single sign on the drawing, this can be any sign inserted by CONE11 either from teh standard libraries of signs or one you have designed yourself

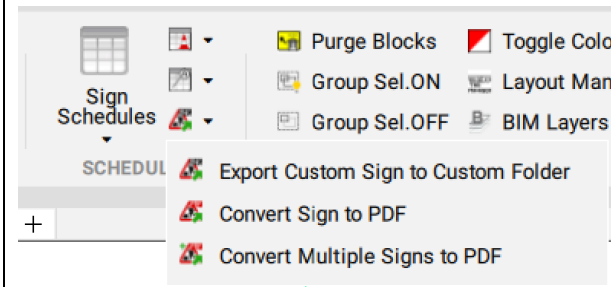
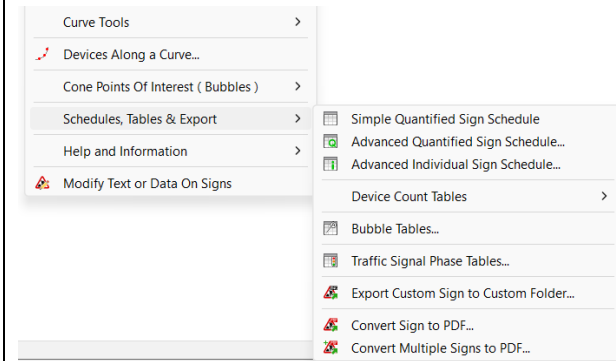
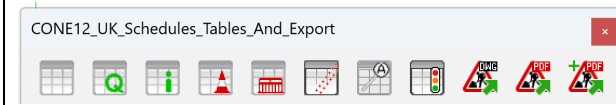
It will then display a file save dialog for you to enter a filename for the PDF file to be saved.

The program will then create the PDF file and scale the file to be actual size.

This PDF file can then be used to import into sign plotter programs or large format printers that you may have to create the sign itself

The

Schedules Tables & Export - Convert Multiple Signs to PDF

Command: CUKMULTISIGN2PDF RIBBON: CONE12 Misc SCHEDULES	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Schedules_Tables_And_Export	

BRICSCAD ONLY

DIALOG BOX:

CONE: Export selected signs to PDF

Instructions

This tool will export Multiple CONE Version 11 type Signs to PDF to the Output folder specified
 1. Pick the Select/Reselect Button and select signs to export
 2. Choose the PDF Filename Method
 3. Amend the PDF File names as desired (Manually Assign Each Line Method only)
 3. Note: Existing PDF file with a matching name will be overwritten
 4. If the background colour is not required, Select the [Do NOT export Sign Background] checkbox
 5. Select the OK button to proceed

PDF Output folder

☐ Do NOT export Sign Background

Selected Signs List Data

QTY	BLOCK NAME	REF/LABEL	COLOUR	DESCRIPTION	SIZE	PDF FILENAME

PDF File Name Method

☒ By Block Name
☐ Auto Generate
☐ Manually Assign

Prefix/Number/Suffix

Prefix

01

Suffix

PDF File Name (Manually Assign)

This tool will export a number of signs selected from the current drawing, to separate PDF files.

On selecting the program option from the menus or ribbon bar, you will get the dialog as shown above.

click the button at bottom left titled "Initial Select or Reselect Signs..." if you have already selected items they will be added to the list, if not you can use the usual methods to select one or more signs from the current drawing.

NOTE: if you select multiple instances of the same sign that will be shown in the first QUANTITY column rather than having multiple line of the same data.

Selected Signs List Data						
QTY	BLOCK NAME	REF/LABEL	COLOUR	DESCRIPTION	SIZE	PDF FILENAME
1	CPT-13-9_1120311272114	13-9	YELLOW	Schedule 13 : Temporary Sign	1050 x 750 : X+Hgt = 60	CPT-13-9_1120311272114
3	CPT7001	7001	RED	Road works ahead	[Hgt Range] : 600, 750, 1000, CPT7001	

PDF Output folder

PDF Output folder

C:\Users\Tony\Documents\

☐ Do NOT export Sign Background

The files will be output to your documents folder by default, should you want to change this folder, click the browse button (the one with three dots shown above)

Sign Background Colour

If you wish the PDF files to contain outline graphics rather than with the solid colour fills,

then check the box labelled "Do NOT export Sign Background"

NOTE: The lettering and symbols/icons will still have colour fills to their elements.

PDF Auto File Naming

PDF File Name Method

☐ By Block Name

☒ Auto Generate

☐ Manually Assign

Prefix/Number/Suffix

Prefix T4_

0001

Suffix SAL7

PDF File Name (Manually Assign)

T4_0001_SAL7

You can select one of three methods to name the PDF files, and each method can have additional characters appended to the start and/or end of the filename.

By Block Name

This will take the name of the block as shown in the second column of the table as the filename (plus prefix & suffix, if specified)

Auto Generate

This will name each file sequentially from 1 upwards (plus prefix & suffix, if specified), the number of leading zero characters can be chosen from the pull down list in the screen grab above.

Manually Assign

This will take the names that exist in the last column from either their block name or sequential numbering methods above, then by selecting the appropriate line in the table you can manually edit the name to be used for the filename

NOTE: if you strip the prefix or suffix characters from the manually entered filename, they WILL NOT be added back by the program

Prefix

Characters entered in this box will be added to the START of the filename when using Block Name or Auto Generate methods

Suffix

Characters entered in this box will be added to the END of the filename when using Block Name or Auto Generate methods

Delete Current Row

If you have selected a sign from the drawing that you do not wish to output, select the line in the table clicking this button will remove it from the table and that file will not be created

You will be prompted that you wish to delete the line before it is actually removed.

Look at Current Sign...

To visually check which sign is selected in the table, click this button and the program will zoom to the extents of that sign and show it full-screen. Press the SPACEBAR to return to the dialog

If the sign is rotated on the drawing it will be shown at the same rotation in this preview window.

To create the individual PDF files, click the OK button at the bottom of the screen, if you attempt to press it twice, or naming clashes, the existing files will be overwritten.

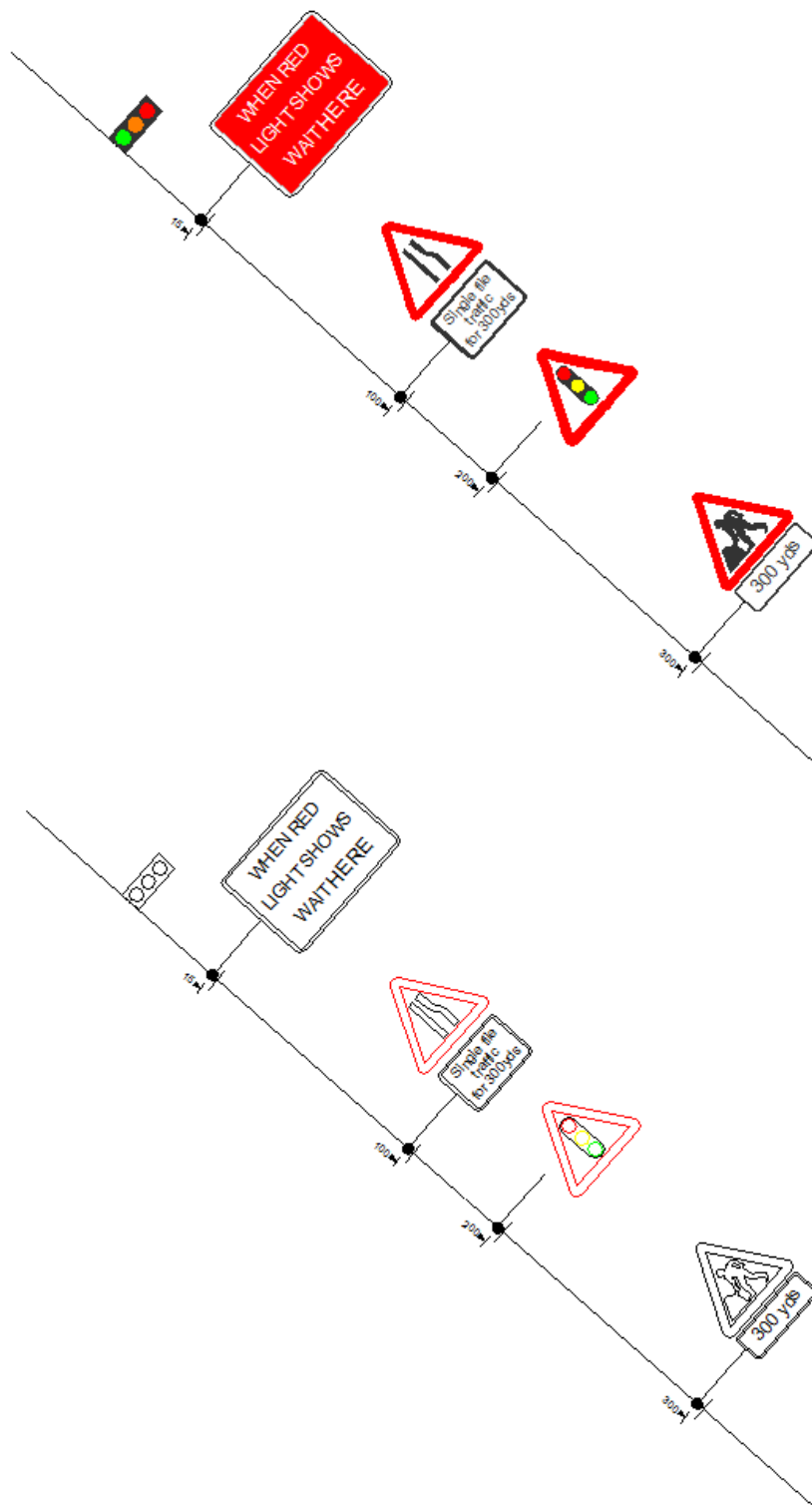
This tool changes the layer status of the CONESIMPLE and CONEFILLED layers. They are designed to be mutually exclusive, and this tool handles them. DO NOT manually freeze/thaw the layers as you could end up with unexpected results.

NOTE: If you manually THAW both layers at the same time, you will see black lines on the red sections of barrier boards, as well as possible black outlines round the white arrows of the 610 circular signs.

Clicking the toggle colour button once or twice will correct this display anomaly for you.

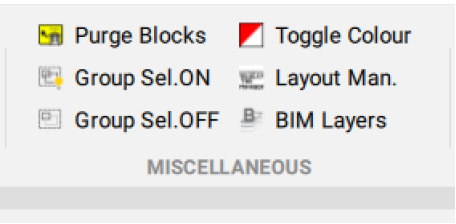
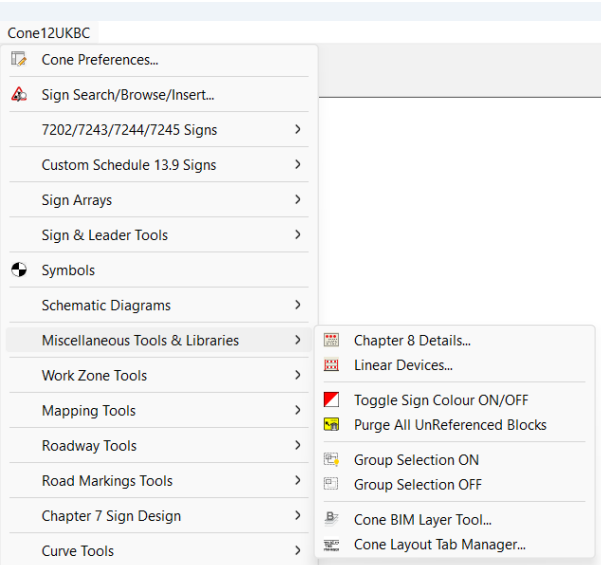
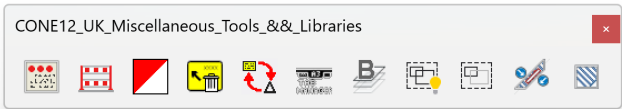
Selecting the tool toggles the display as shown below

COLOUR ON



COLOUR OFF

Miscellaneous Tools & Libraries – Purge All UnReferenced Blocks

Command: UKPURGEBLOCKS RIBBON: CONE12 Misc MISCELLANEOUS	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Miscellaneous Tools and Libraries	

This tool removed all unused blocks from the drawing database.

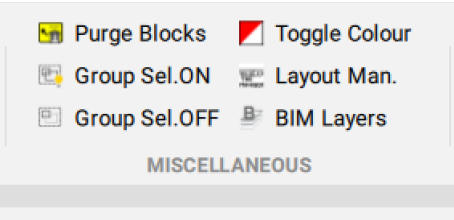
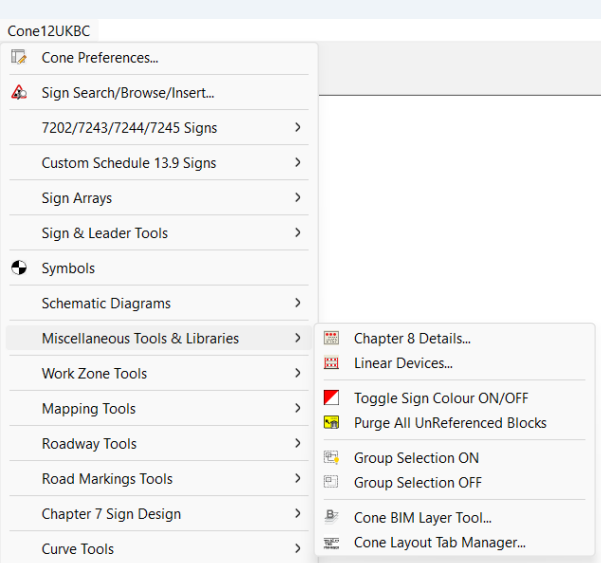
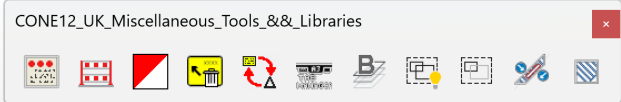
It does not alter the view of the drawing, it is more a housekeeping tool. Getting rid of stored items that may have been previously used and deleted, after running, save the drawing and it should be considerably smaller in size and faster to load and edit.

Click the tool icon and the program will remove all blocks that have zero references in the drawing.

You may have to select the tool a number of times to remove any nested icons – especially common if you have loaded Ordnance Survey maps or custom designed chapter 13 signs

You can also use the PURGE command a standard function in your CAD program to get rid of unused layers, text styles and groups to further compact the drawing database

Miscellaneous Tools & Libraries – Group Select ON/OFF

Command: (SETVAR "PICKSTYLE" 1) RIBBON: CONE12 Misc MISCELLANEOUS	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Miscellaneous Tools and Libraries	

RIBBON: CONE11 Part 2: Miscellaneous

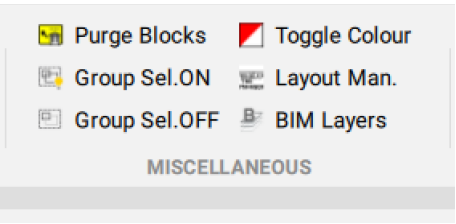
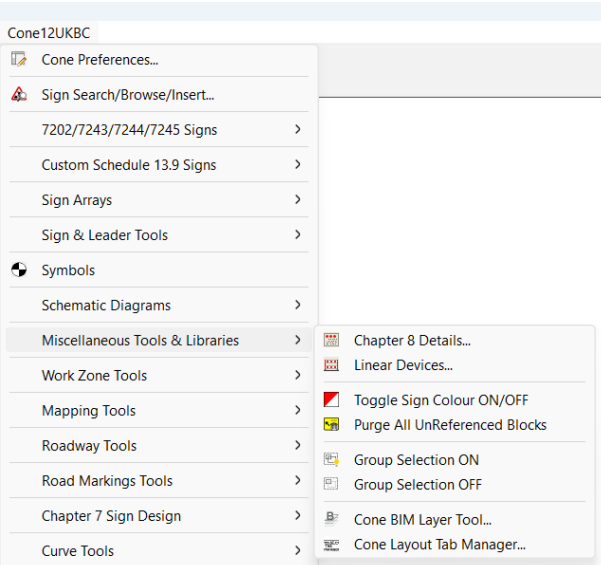
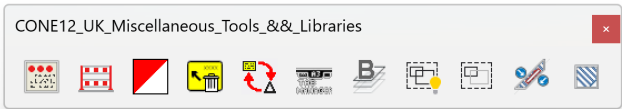
This tool turns the selection of individual items within a group ON or OFF

NOTE: you can also use the keyboard shortcut CTRL & H

When CONE items are inserted on a drawing, the sign insert symbol, leader line and sign face symbol, they are usually grouped to enable them to be easily selected together. The same goes for inserting devices along a curve.

Should you want to move/erase or otherwise edit one of these items rather than all of the items in a group, you can turn the Group Selection OFF. Then when you have completed editing turn it back on again, the remaining items will still be grouped together.

Miscellaneous Tools & Libraries – Group Select ON/OFF

Command: (SETVAR "PICKSTYLE" 0) RIBBON: CONE12 Misc MISCELLANEOUS	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Miscellaneous Tools and Libraries	

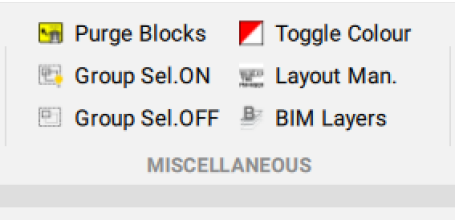
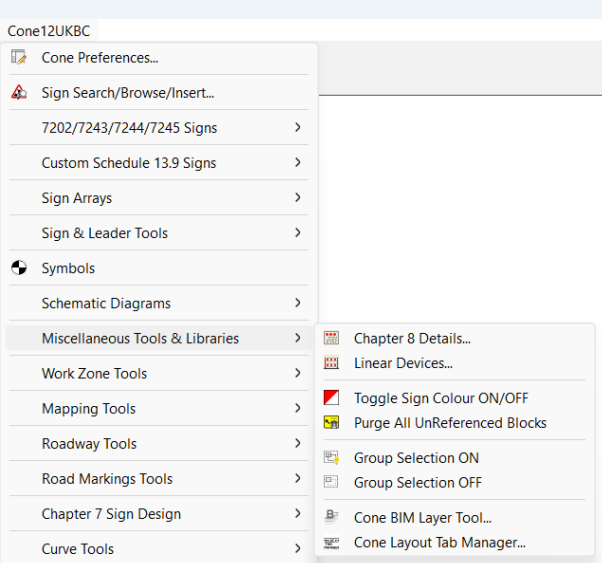
This tool turns the selection of individual items within a group ON or OFF

NOTE: you can also use the keyboard shortcut CTRL & H

When CONE items are inserted on a drawing, the sign insert symbol, leader line and sign face symbol, they are usually grouped to enable them to be easily selected together. The same goes for inserting devices along a curve.

Should you want to move/erase or otherwise edit one of these items rather than all of the items in a group, you can turn the Group Selection OFF. Then when you have completed editing turn it back on again, the remaining items will still be grouped together.

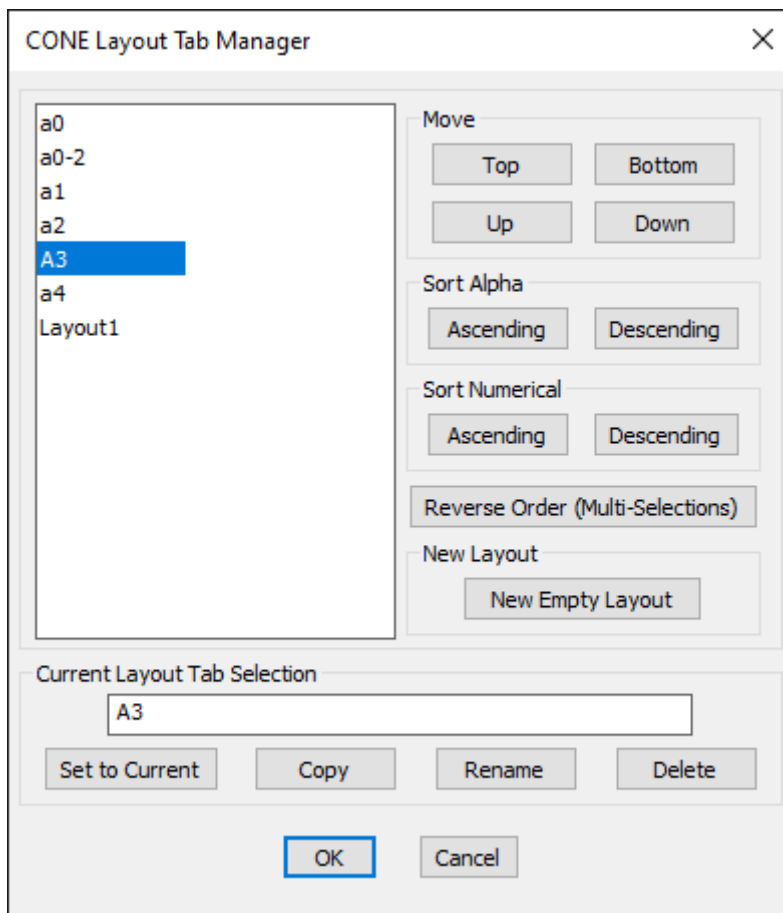
Miscellaneous Tools & Libraries – Cone Layout Tab Manager

Command: CUKTABMANAGE RIBBON: CONE12 Misc MISCELLANEOUS	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Miscellaneous Tools and Libraries	

RIBBON: CONE11 Part 2: Miscellaneous

This tool assists you to manage multiple tabs for layouts at the bottom left of the drawing window.

When you have more than three or layout tabs on a single drawing, they may not all appear at once or the names may appear truncated to enable more layout named tabs to be shown



Move: Top

The layout selected in the list of all layouts on the drawing will be move to the top of the list, this will then be the first tab when the dialog is closed.

Move: Bottom

The layout selected in the list of all layouts on the drawing will be move to the bottom of the list, this will then be the last tab when the dialog is closed.

Move: Up

The layout selected in the list of all layouts on the drawing will be one place nearer to the top of the list.

Move: Down

The layout selected in the list of all layouts on the drawing will be one place nearer to the bottom of the list.

Sort Alpha

Ascending

All the layouts in the list will be sorted into alphabetical order down the list.

Descending

All the layouts in the list will be sorted into reverse alphabetical order down the list.

Sort Numerical

Ascending

All the layouts in the list will be sorted into numerical order (where the layout name can be identified as a number) down the list.

Descending

All the layouts in the list will be sorted into reverse numerical order (where the layout name can be identified as a number) down the list.

Reverse Order (Multi Selections)

The Selected Layouts in the list of those in the dialog will be re-arranged in reverse order, to select multiple items hold the SHIFT key whilst clicking individual layout names, alternatively, select one layout, then hold the CTRL key and click a second to select all layouts between the two layouts clicked.

New Empty Layout

This option will create a new layout from the default template file. The layout will be given the default name "LayoutX", where "X" is the next available unused number for layouts.

Set to Current

Will make the current selected layout tab the active layout, if multiple layouts are selected it will select the FIRST in the list.

Note: this will not work if you have the drawing currently in MODEL view

Copy

This button will create a duplicate of the current selected layout

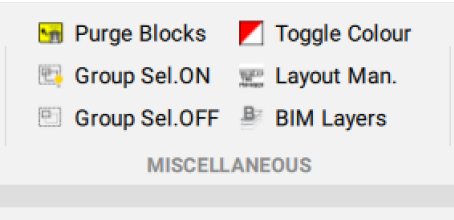
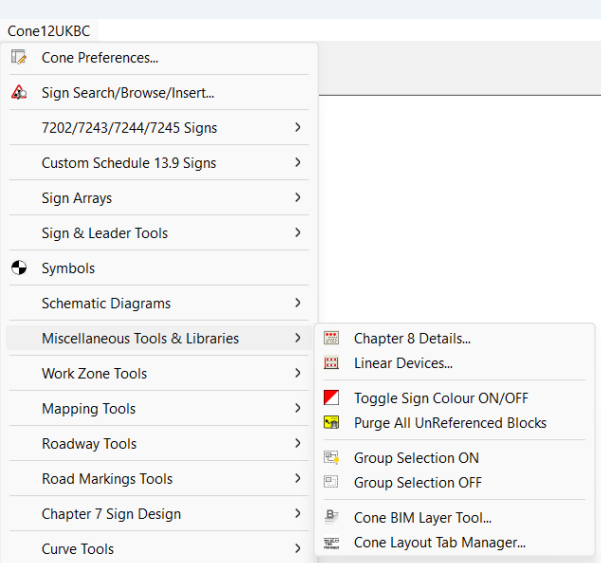
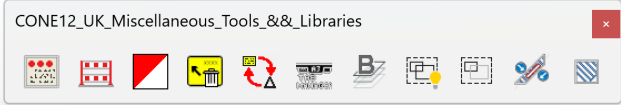
Rename

This button will change the name of the current selected layout tab to be whatever is typed into the "Current Layout Tab Selection" edit box in the dialog. DO NOT enter a name that currently is used for another tab or the program will not update the layout tabs

Delete

This button will prompt you to confirm you wish the selected layout tab to be deleted, then delete that layout.

Miscellaneous Tools & Libraries – Cone BIM Layer Tool

Command: CUK2DBIMLAYERS RIBBON: CONE12 Misc MISCELLANEOUS	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Miscellaneous Tools and Libraries	

This tool attempts to move 2D CONE items from their standard CONE11 named layers to BIM compatible named layers.

In the dialog below, you can select from the following CONE layers:

2D Signs & Sign Symbols

2D Cones

2D Studs

2D Barriers

2D Road Markings

Each layer has an associated BIM layer to attempt to move the selected items onto.

After selecting the OK button, you will be prompted to select the items to change layers, the program will then confirm the number of entities changed on the drawing.

CONE 2D BIM Layer Tool

This tool changes the active 2D CONE Objects to the layers specified below

Note: Only Top Level Blocks are considered

Upon Selecting the OK button you will be prompted for a selection set using the standard CAD object selection methods

It is recommended that you SAVE the drawing first

CONE 2D objects on layers that are OFF, FROZEN or LOCKED will not be changed

You may freely change the layer names below to suit your own requirements and save them to your own user standards

Current 2D Layer Settings

☒ 2D Signs & Sign Symbols

☒ 2D Cones

☒ 2D Studs

☒ 2D Barriers

☒ 2D Road Marking

Select Current User Standard

User Standard 1

User Standard 2

User Standard 3

User Standard 4

User Standard 5

User Standard 6

Rename:

Restore System Uniclass Defaults

Save Current User Standard Defaults

Export Standards...

Import Standards...

OK

Cancel

Changing Layer names

Current 2D Layer Settings

☒ 2D Signs & Sign Symbols

☒ 2D Cones

☒ 2D Studs

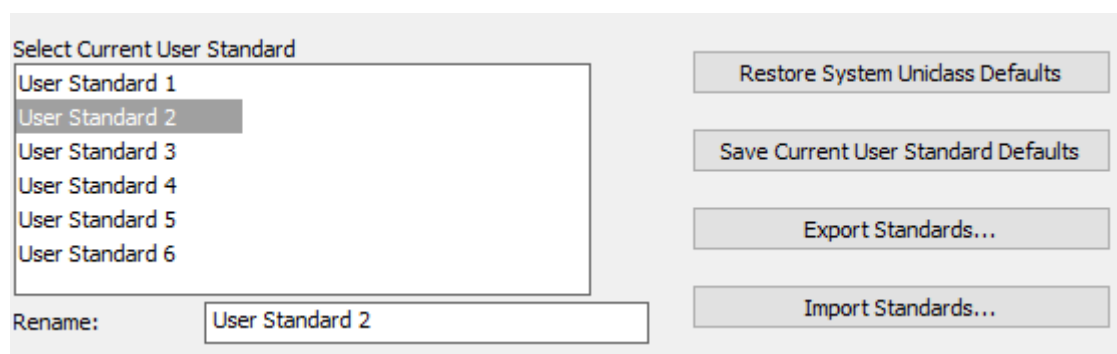
☒ 2D Barriers

☒ 2D Road Marking

BEFORE moving elements to new layers, you can edit the layers names to be used by typing new text into the edit boxes opposite each of the different entity types, these will be remembered by the program whilst working on this drawing see below for saving different naming schemes.

Restore System Uniclass Defaults

If you have edited any of the BIM layer names in the dialog , clicking this button will reset them to the original default names that came with CONE.



Select Current User Standard

You may have up to SIX different naming schemes for the BIM layer tool to work with, these can be selected by clicking on their name in the list at the bottom left of the dialog

Rename

To make the different BIM layer schemes easier to use, you can rename the default titles “User Standard X” to something more memorable.

Select the User Standard you wish to edit from the list of items above, the name will appear in the Rename edit box

Change the text to be whatever you want, then press ENTER

The list of layer name schemes will be updated to show what you have entered.

Save Current User Standard Defaults

Click this button to make the changes to your layer schemes for future drawings

Export Standards...

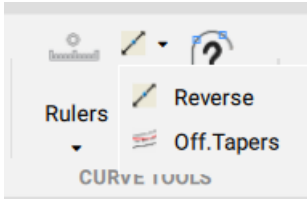
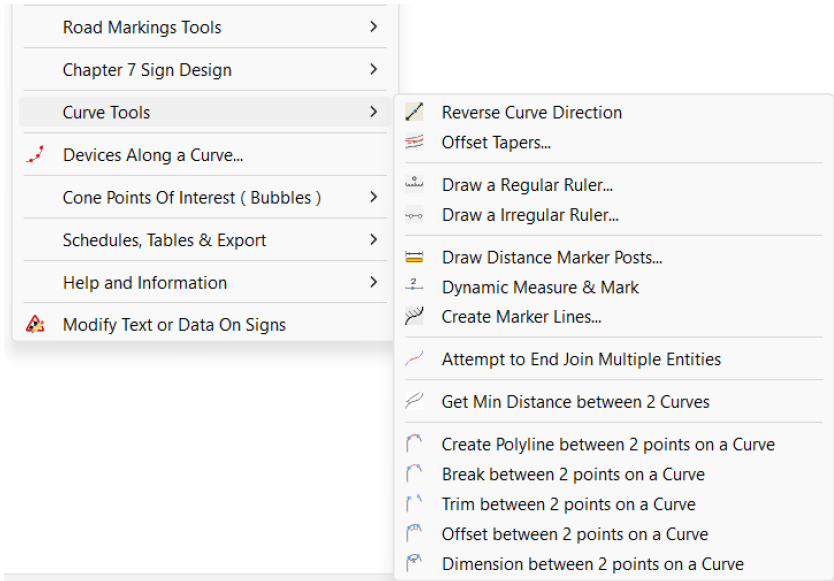
You can save the layer scheme names and with layer names they have to a file on your computer, you can name this anything you wish it will have the file extension "*.std"

This can be saved as a backup or sent to a colleague to import (see below) so you are using identical settings for BIM layer naming.

Import Standards...

This tool will read and reset the values for BIM layer names and the layer schemes, click the button and the program will ask you to locate and select the previously saved file with file extension "*.std"

Curve Tools - Reverse Curve Direction

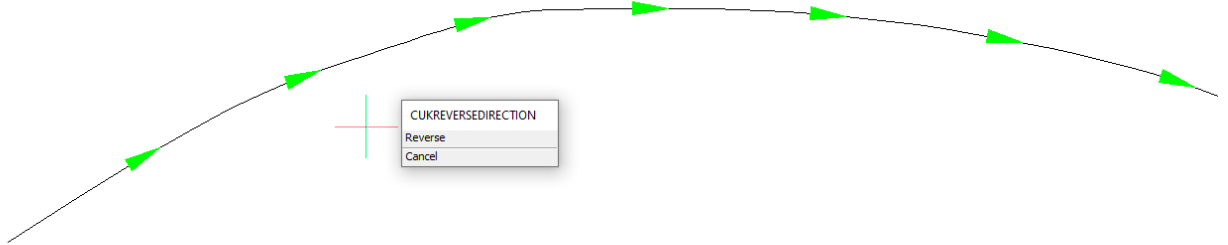
Command: CUKREVERSEDIRECTION RIBBON: CONE12 Misc CURVE TOOLS	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Curve_Tools	

NO DIALOG BOX:

The reverse curve tool changes the direction of a polyline from the original order in which the points were drawn to the reversed order

Select the polyline you wish to change the direction

the program adds a series of green arrowheads showing the current direction of the polyline

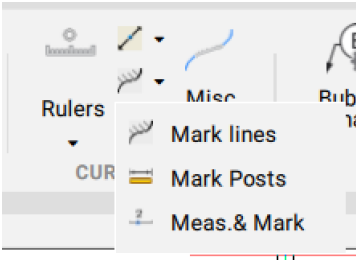
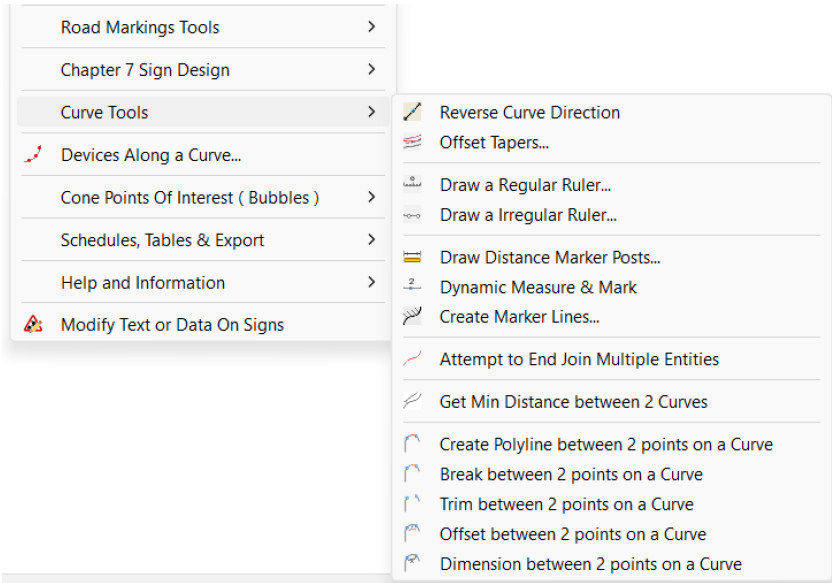


Press the R key and then ENTER on the keyboard to reverse the arrowheads and the direction in which the polyline is drawn

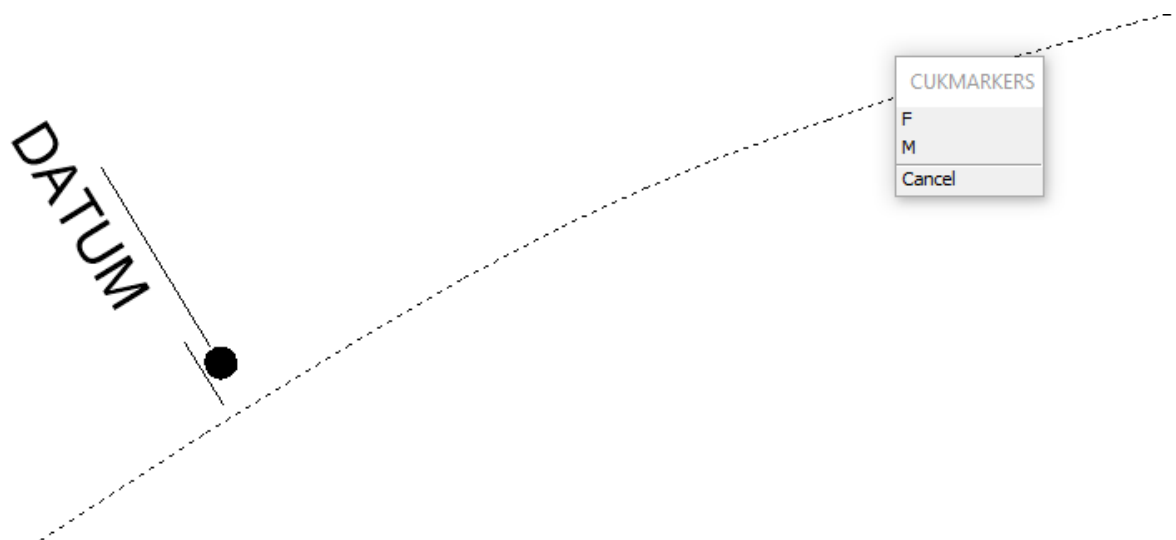
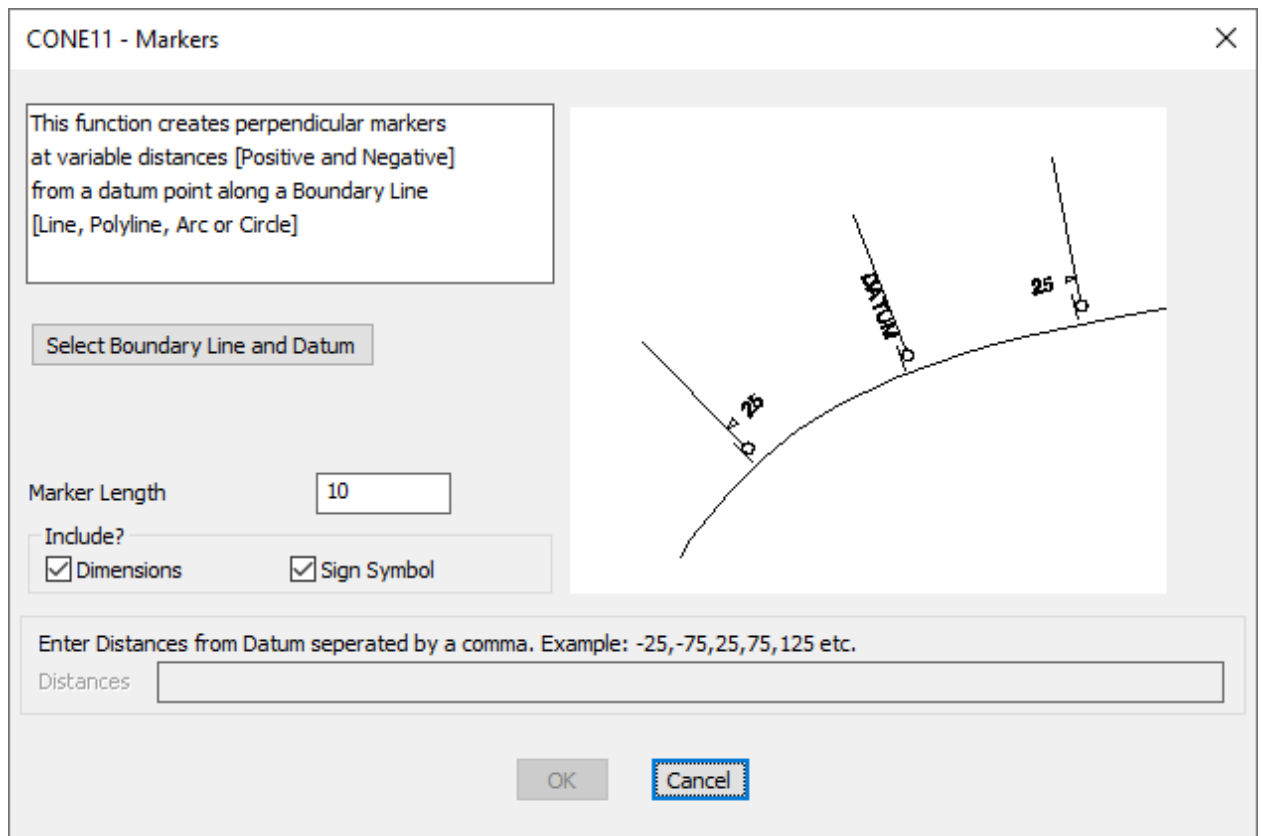
You may repeatedly press R & ENTER to keep re-reversing the order each time

Press ENTER alone to exit the function

Curve Tools - Create Marker Lines

Command: CUKREVERSEDIRECTION RIBBON: CONE12 Misc CURVE TOOLS	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Curve_Tools	

DIALOG BOX:

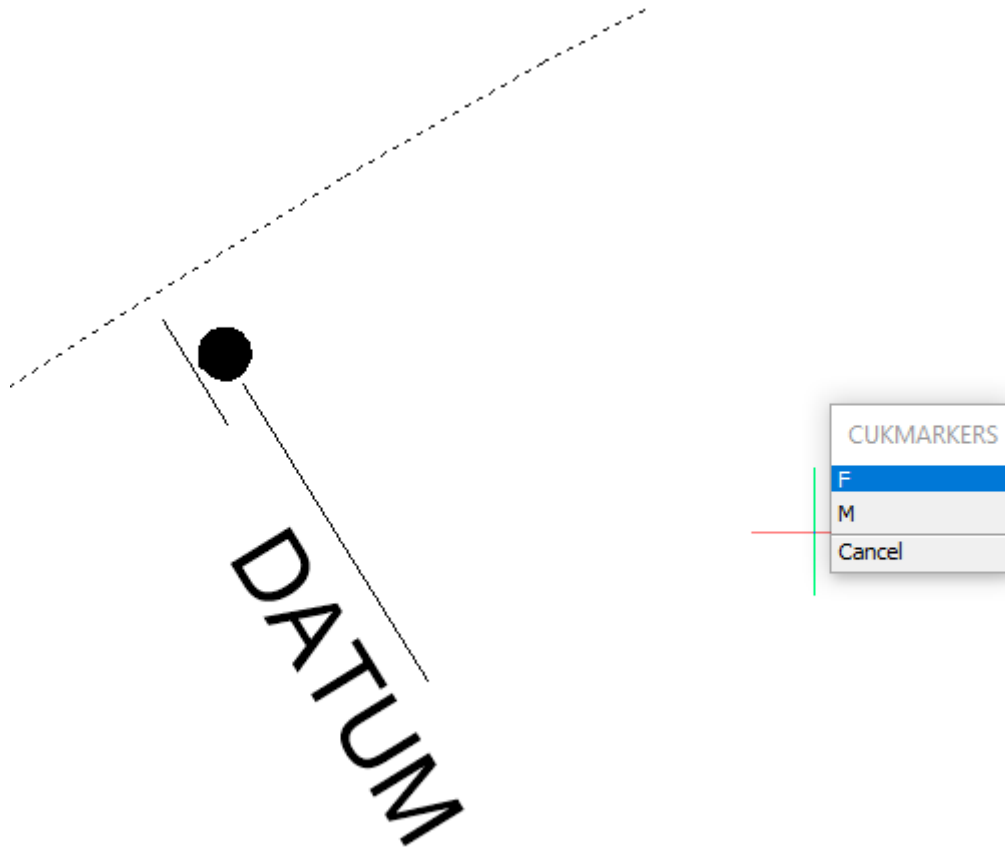


After selecting the polyline to add markers, then the datum point you have two options:

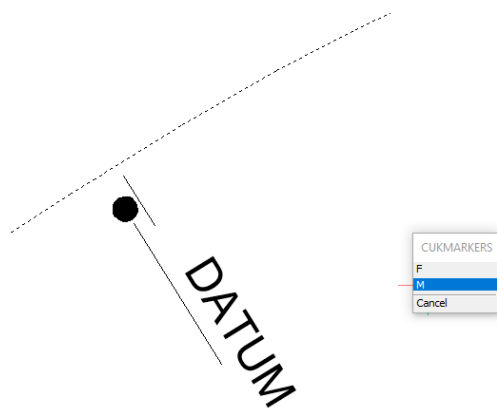
Flip

Mirror

Selecting FLIP will move the marker line to the opposite side of the datum polyline

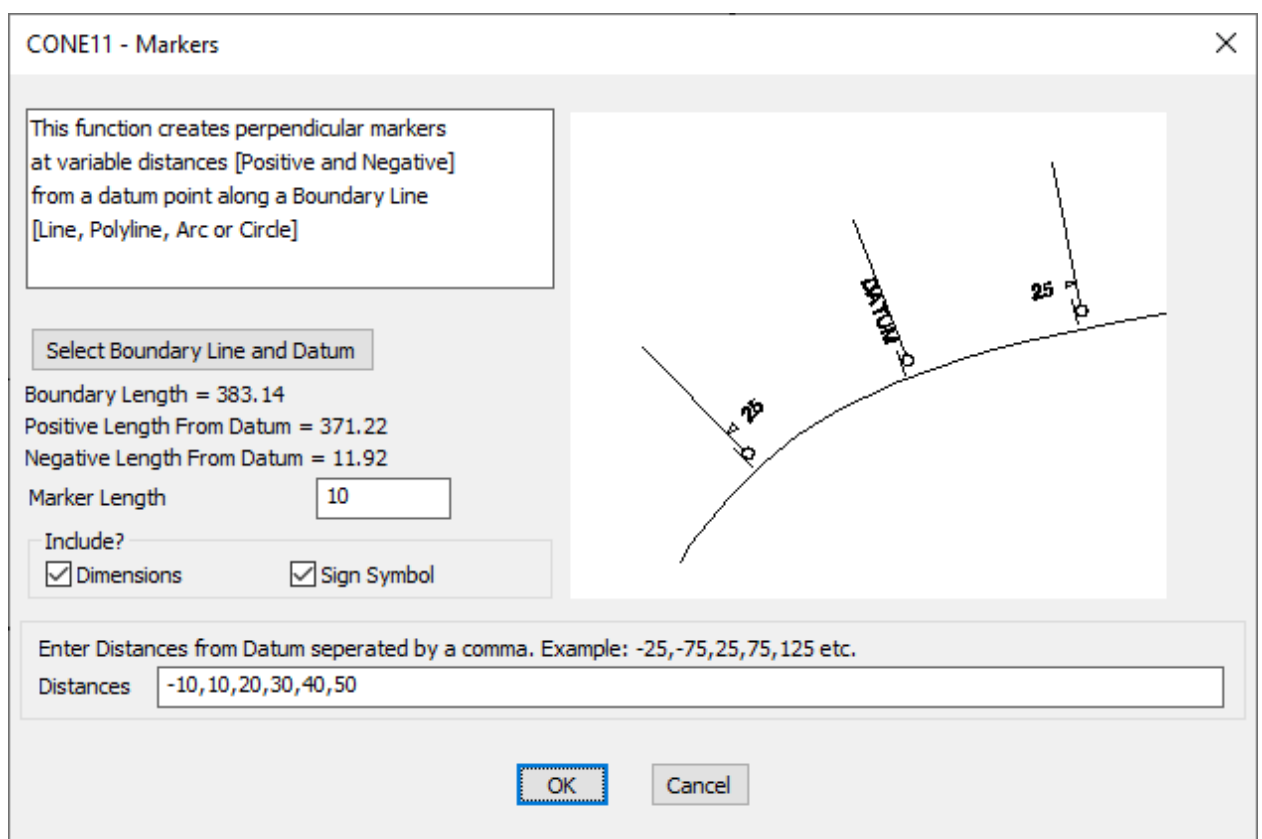


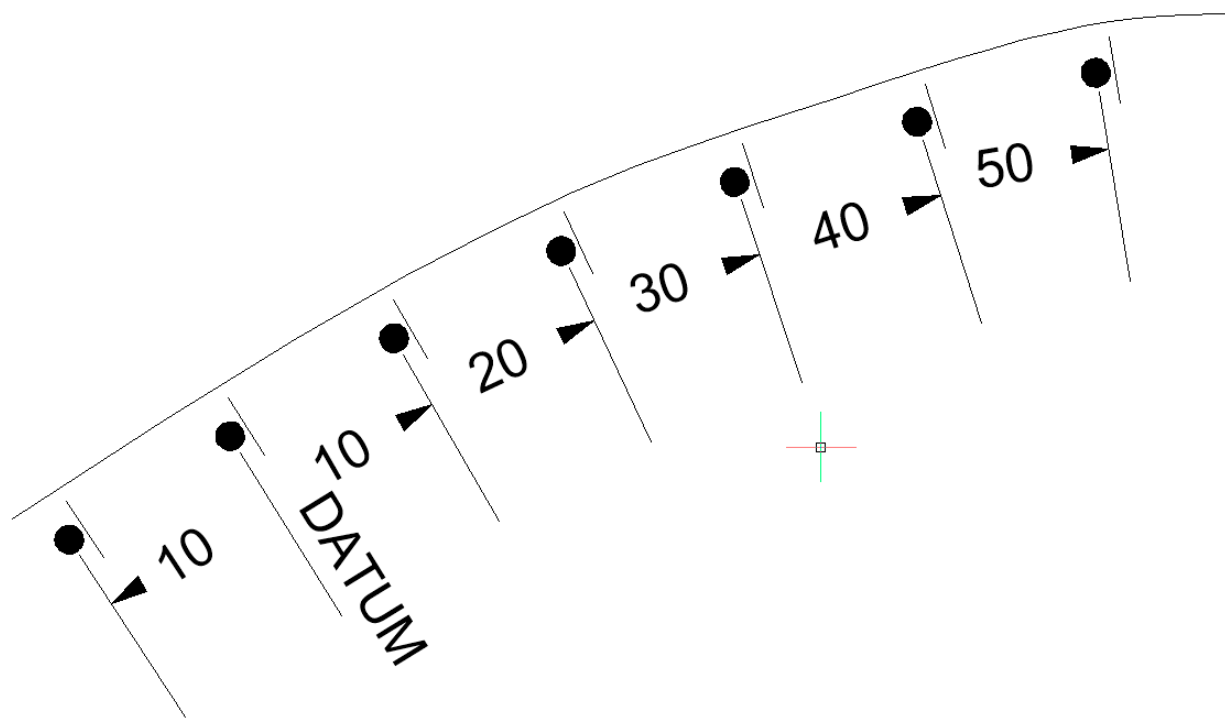
Selecting MIRROR will rotate the marker symbol adjacent to the datum polyline by 180 degrees



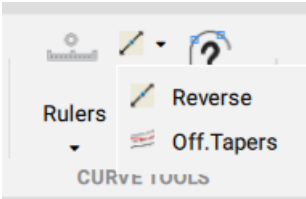
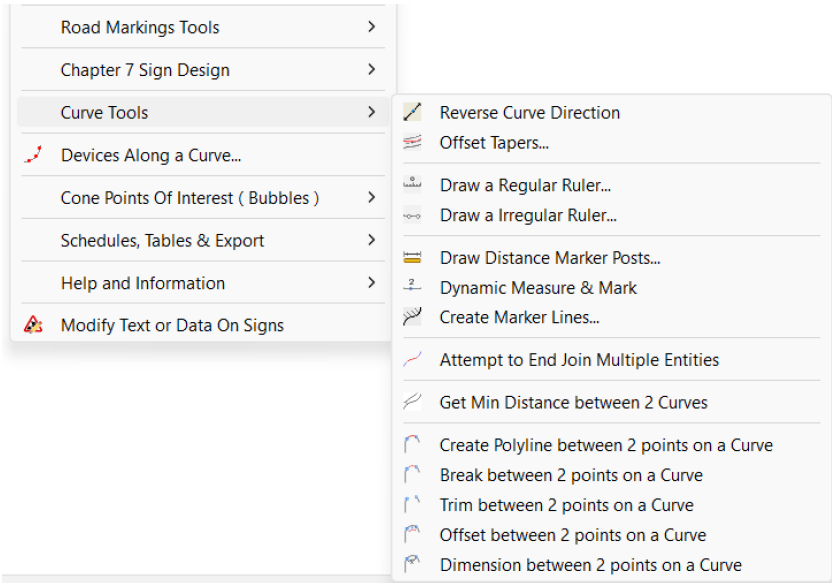
When inserting multiple markers, you must separate the distances to the markers from the reference point along the polyline.

The distances do not have to be in numerical order



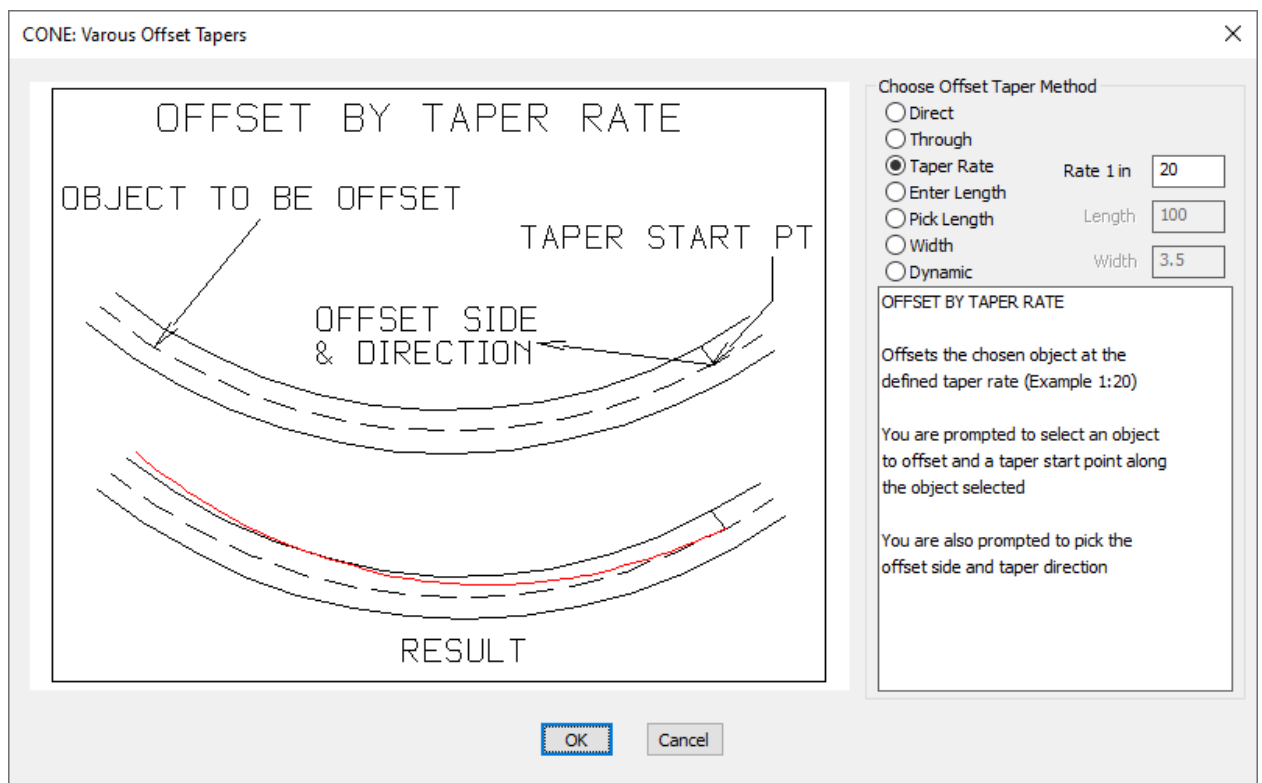


Curve Tools - Offset Tapers

Command: CUKOTAPER RIBBON: CONE12 Misc CURVE TOOLS	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Curve_Tools	

DIALOG BOX:

draw smooth setting out lines for cone placement or other devices, there are a number of ways to perform this from the dialog shown:



Direct

Offset the chosen object at a uniform taper directly to a taper end point

You are prompted to select an object to offset and a taper start point along that object

The taper end point is another point picked anywhere on the drawing

The actual taper rate is reported at the end of the routine.

Through

Offsets the chosen object at a uniform taper rate through a point and continues the taper to the end of the chosen object.

You are prompted to select an object to offset and a taper start point along that object.

The taper through point is another point picked anywhere on the drawing.

The actual taper rate is reported at the end of the routine.

Taper Rate

Offsets the chosen object at the defined taper rate – which can be specified in the dialog box.

You are prompted to select an object to offset and a taper start point along that object.

You are also prompted to pick the offset side and taper direction.

The taper continues to the end of the chosen object.

Enter Length

Offsets the chosen object at the defined taper rate – which can be specified in the dialog box.

You are prompted to select an object to offset and a taper start point along that object.

You are also prompted to pick the offset side and taper direction.

The taper continues to the length specified in the dialog box opposite.

Pick Length

Offsets the chosen object at the defined taper rate – which can be specified in the dialog box.

You are prompted to select an object to offset and a taper start point along that object.

You are also prompted to specify a taper end position

You are also prompted to pick the offset side and taper direction.

Width

Offsets the chosen object at the defined taper rate.

You are prompted to select an object to offset and a taper start point along that object.

The offset taper then starts from the picked point and tapers until the desired width is reached.

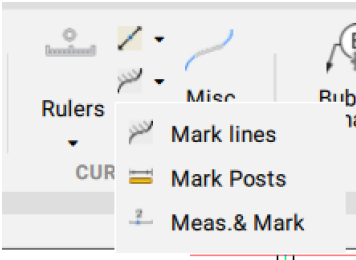
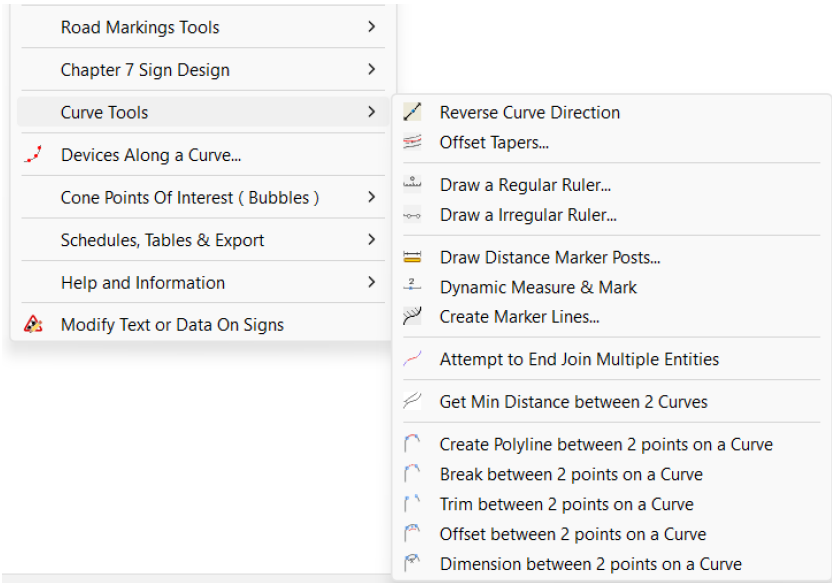
Dynamic

Offsets the chosen object at the defined taper rate.

You are prompted to select an object to offset and a taper start point along that object.

The taper end point is indicated by moving the mouse. The taper is updated in real-time.

Curve Tools - Draw Distance Marker Posts

Command: CUKDISTMARKER RIBBON: CONE12 Misc CURVE TOOLS	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Curve_Tools	

DIALOG BOX:

CONE: Draw distance posts every 100m

Start Distance (Kms):

Start Distance (Tenths of Kms):

Distance between posts as % of 100m:

Post Mark Length:

Text Height:

☐ Descending Values?

Place ruler on layer?

☒ Cone Ruler Layer ☒ Create a Group?

☐ Current Layer

Placement Method?

☒ Between 2 points on a pre-drawn curve

☐ Fully along on a pre-drawn curve

☐ In a straight line between two picked points

Style

☒ Align+Dot

☐ Align+Slash

☐ Perp+Dot

☐ Perp+Slash

You have four options for the style of Marker posts

Align + Dot

The distances text will be drawn parallel to the polyline selected and with a dot between kilometres & the decimal value i.e 0.1

Align + Slash

The distances text will be drawn parallel to the polyline selected and with a slash character between kilometres & the decimal value i.e 0/1

Perp + Dot

The distances text will be drawn at 90 degrees to the polyline selected and with a dot between kilometres & the decimal value i.e 0.1

Perp + Slash

The distances text will be drawn at 90 degrees to the polyline selected and with a slash character between kilometres & the decimal value i.e 0/1

Start Distance (kms)

You can specify the value for the first marker post in Kilometres here shown as 0

Start Distance (tenths of kms)

You can specify the value for the first 100m division of the marker post label (after the decimal dot or slash character)

Distance between posts as % of 100m

The marker posts are drawn at 100m intervals, changing this scale factor will draw them closer together but the labelling will remain at 100m divisions

Post Length Mark

The length (in metres) of the post mark

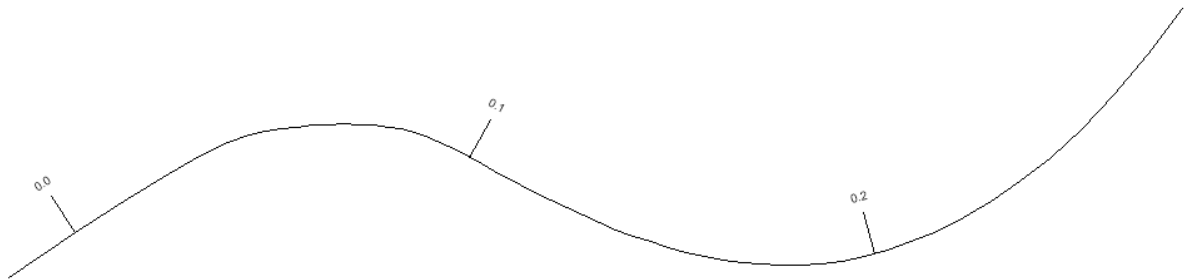
Text Height

The height of the text for the marker labels

Select the polyline to draw markers along, then indicate a start point, you can type or indicate with the mouse the length over which you want markers to be drawn

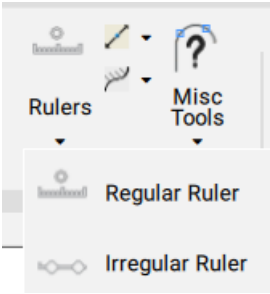
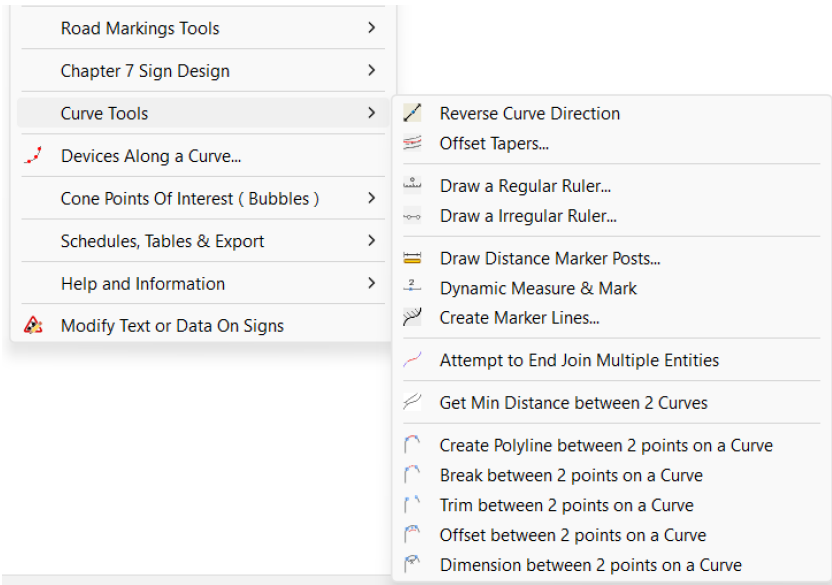


After selecting the far end distance for the marker posts, they are drawn along the polyline.

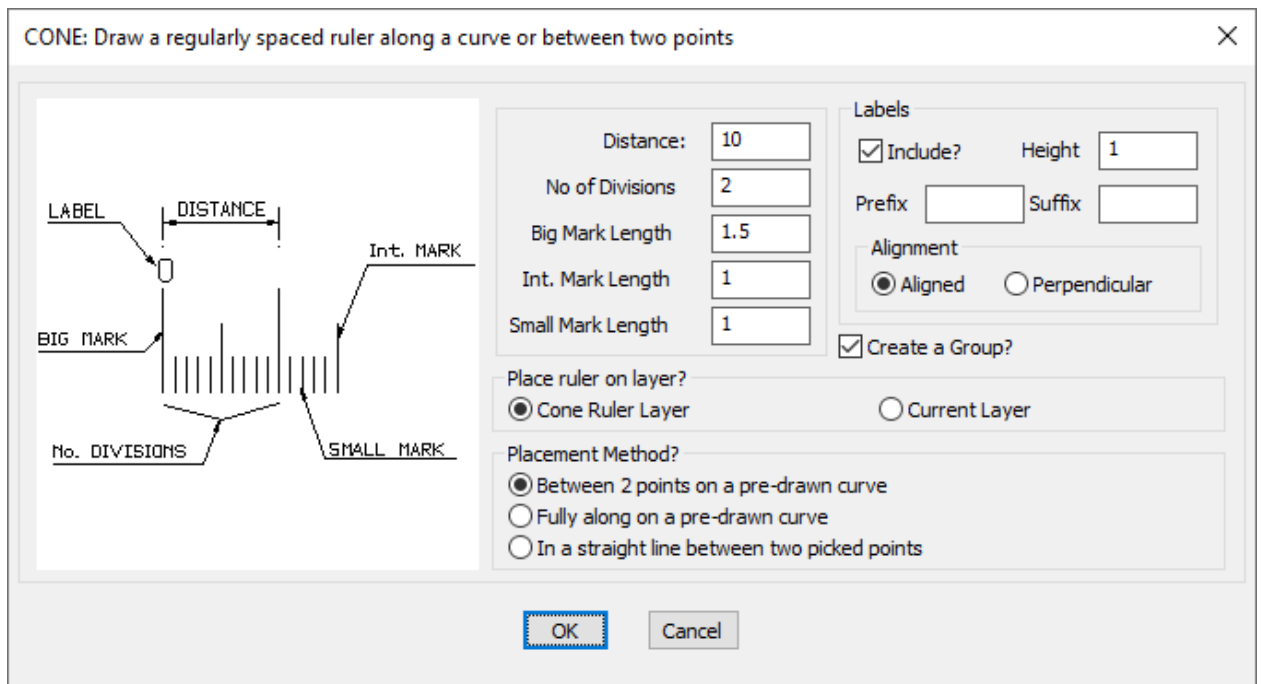


You have the option to flip the markers to the opposite side of the polyline or leave them where they have been inserted.

Curve Tools - Draw a Regular Ruler

Command: CUKRRULER RIBBON: CONE12 Misc CURVE TOOLS	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Curve_Tools	

DIALOG BOX:



The function allows you to draw a series of markers at fixed regular intervals perpendicular to a curve.

The slide image shows how the various division lengths and annotation markers are specified.

Distance default value 100

Interval at which the labels will be inserted.

No of Divisions *default value 20*

The number of sub divisions between the distance specified above.

Big Mark Length *default value 9*

Length of the divider marks at the distance interval specified above.

Int Mark Length default value 6

Length of the divider marks at the midpoint of distance interval specified above.

Small Mark Length *default value 3*

Length of the divider marks at the divisions between distance interval specified above.

Labels:

Height default value 2.5

This dimension is in metres on the drawing

Prefix/Suffix default value BLANK

These text values if specified will be written before and after the distance labels.

Aligned/Perpendicular *default value ALIGNED*

The text alignment can be specified to be aligned parallel to the curve, or perpendicular.

Layers:

The choice of drawing the ruler elements on the current selected layer, or the Cone Ruler Layer "CONERULER"

Placement method:

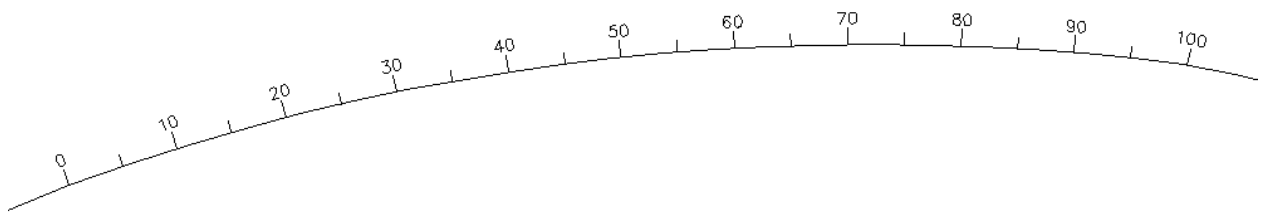
Along a pre-drawn curve

The ruler elements will be drawn perpendicular to a selected curve, you will be prompted to specify the start and end points along the curve.

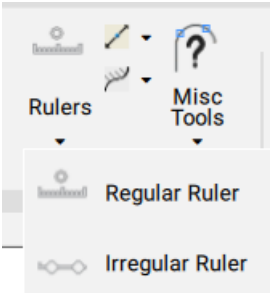
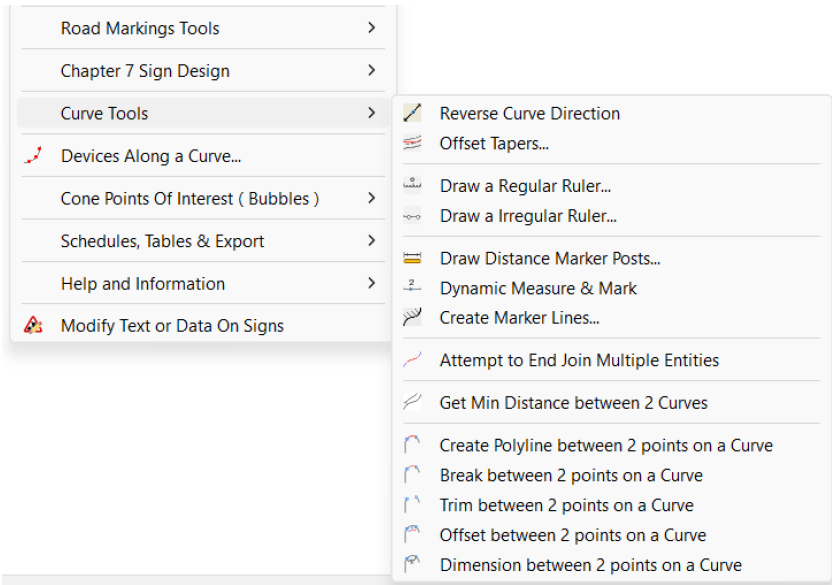
Between two points

The ruler elements will be drawn directly between the start and end points you indicate.

Once the function has drawn the ruler elements you have to option to **mirror** them to the **other side** of the line from which they were drawn.



Curve Tools - Draw a Irregular Ruler

Command: CUKIRULER RIBBON: CONE12 Misc CURVE TOOLS	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Curve_Tools	

DIALOG BOX:

CONE: Draw an irregularly spaced ruler along a curve or in a straight line [X]

Diagram illustrating the ruler layout with points labeled 11, 8, 0, 3, 15, 25. A 'LABEL' points to the 11 mark, 'NEG-' to the 8 mark, 'POS+' to the 3 mark, and 'MARK OR POINT' to the 0 mark. 'DIST' labels are between the marks. A 'DATUM' line is at the 0 mark.

Enter distances in positive direction - (positive values only)

0 0 0 0 0 0 0 0 0 0

Enter distances in negative direction if reqd - (positive values only)

0 0 0 0 0 0 0 0 0 0

Clear All Distances

Mark or Point Style: ☒ Mark ☐ A ☐ B ☐ C ☐ D ☐ E

Mark Length (Mark Style Only): 6

Labels: ☒ Include?

Height: 2.5 Prefix: Suffix:

Alignment: ☒ Aligned ☐ Perpendicular

☒ Create a Group?

Place ruler on layer? ☒ Cone Ruler Layer ☐ Current Layer

Placement Method? ☒ Along a pre-drawn curve ☐ In a straight line

OK **Cancel**

ALTERNATIVE POINT STYLES

MARK A B C D E

The irregular ruler function draws line marker points at user-specified distances

Enter a list of up to ten positive and ten negative distances in the input boxes

NOTE: although the negative distances are drawn in the opposite direction from the start point, their values must be entered WITHOUT a MINUS SIGN.

Clear All Distances

Clicking the button will reset all the boxes to zero, allowing you to enter a new set of values, there is no warning that all existing values will be cleared.

You can draw individual marks as with the regular ruler function specifying a length for those marks, or insert point entities at the distances the point styles available are:

A: Cross

B: Circle

C Circle and Cross

D Square

E Square and Cross

Labels:

Height default value 2.5

This dimension is in metres on the drawing

Prefix/Suffix default value BLANK

These text values if specified will be written before and after the distance labels.

Aligned/Perpendicular *default value ALIGNED*

The text alignment can be specified to be aligned parallel to the curve, or perpendicular.

Layers:

The choice of drawing the ruler elements on the current selected layer, or the Cone Ruler Layer "CONERULER"

Placement method:

Along a pre-drawn curve

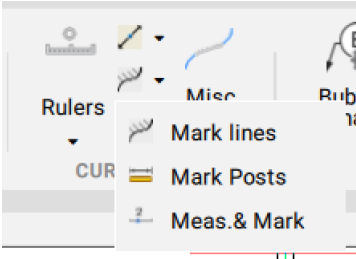
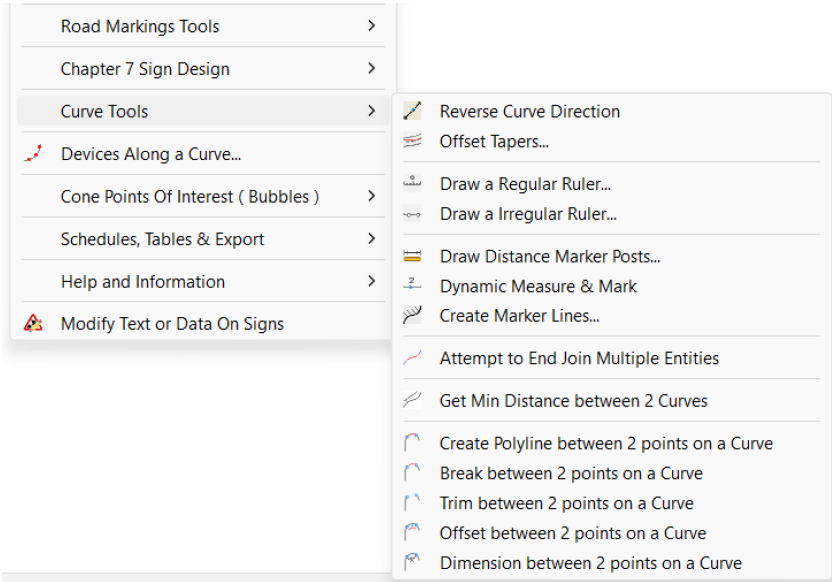
The ruler elements will be drawn perpendicular to a selected curve, you will be prompted to specify the start and end points along the curve.

In a straight line

The ruler elements will be drawn directly between the start and end points you indicate.

Once the function has drawn the ruler elements you have to option to **mirror** them to the **other side** of the line from which they were drawn.

Curve Tools - Dynamic Measure & Mark

Command: CUKDM RIBBON: CONE12 Misc CURVE TOOLS	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Curve_Tools	

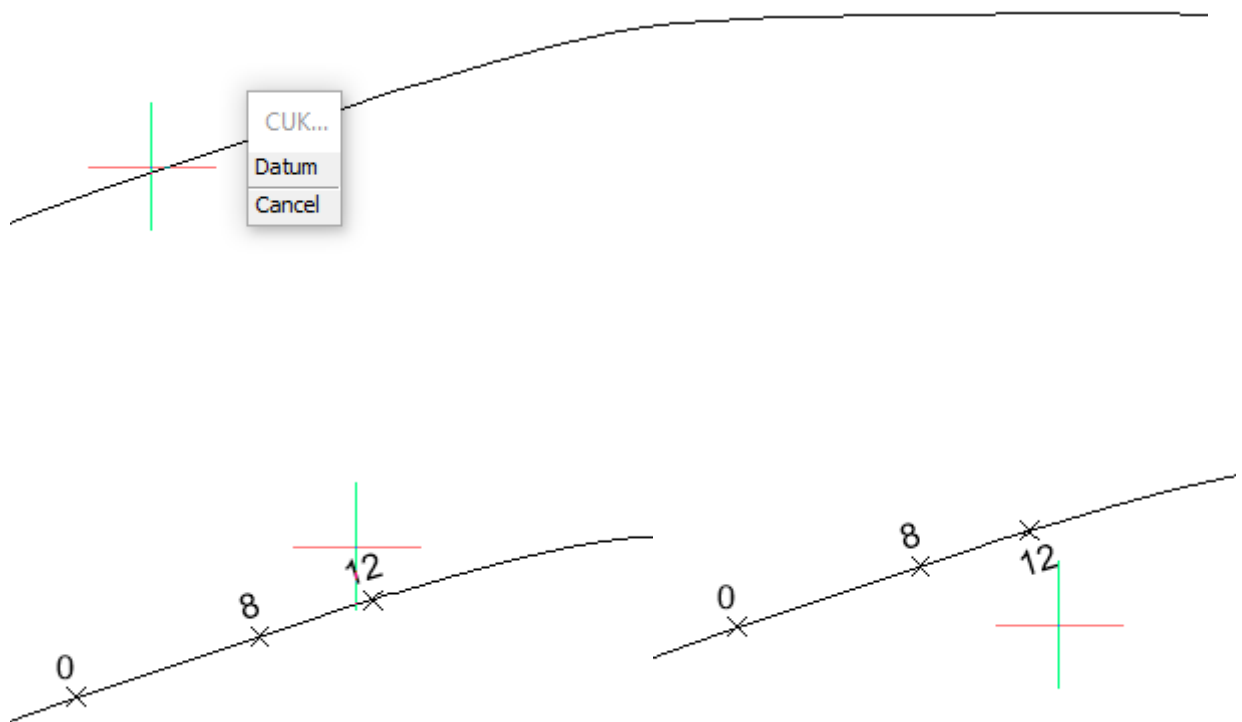
DIALOG BOX:

This function draws marker points along a selected curve and annotates the distance from a start point.

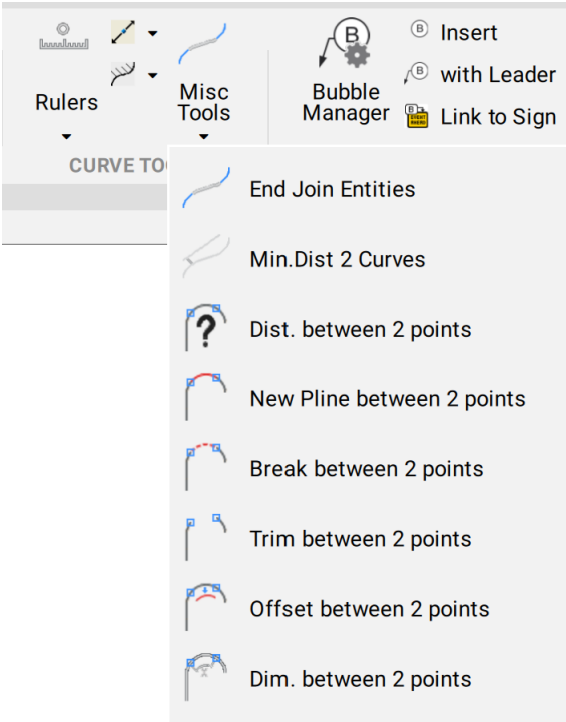
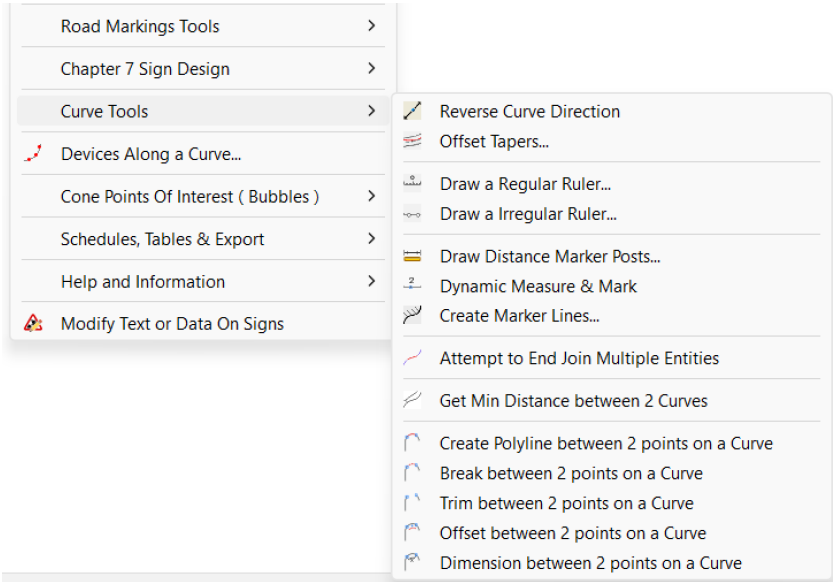
The program prompts you to select a curve element on the drawing, then a start position along that curve.

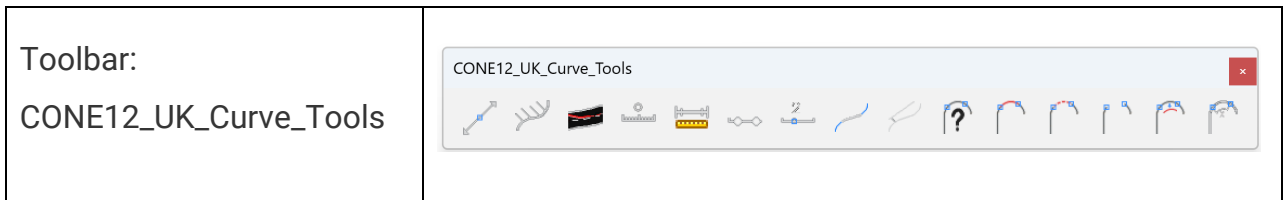
Subsequently clicking at points along the curve element will display the distance to that point.

Alternatively you can type a specific distance for the marker point to be inserted.



Curve Tools - Attempt to End Join Multiple Entities

Command: CUKEJMS RIBBON: CONE12 Misc CURVE TOOLS	
CONE12UKBC Pull Down Menu	



DIALOG BOX:

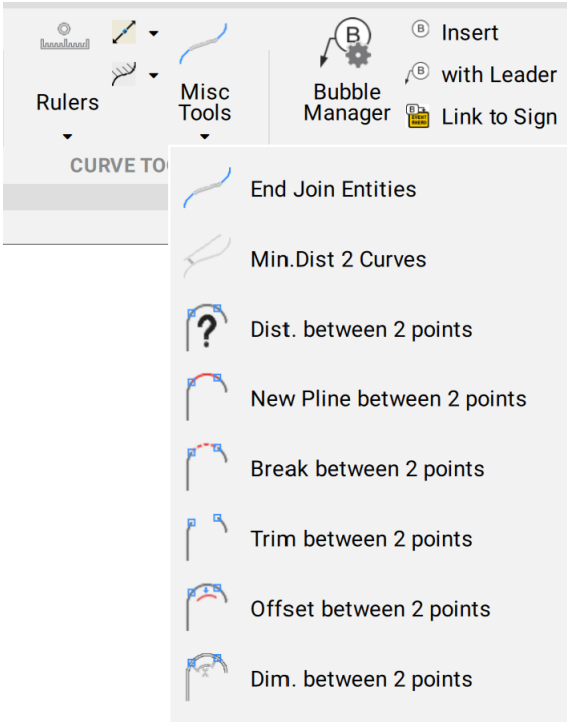
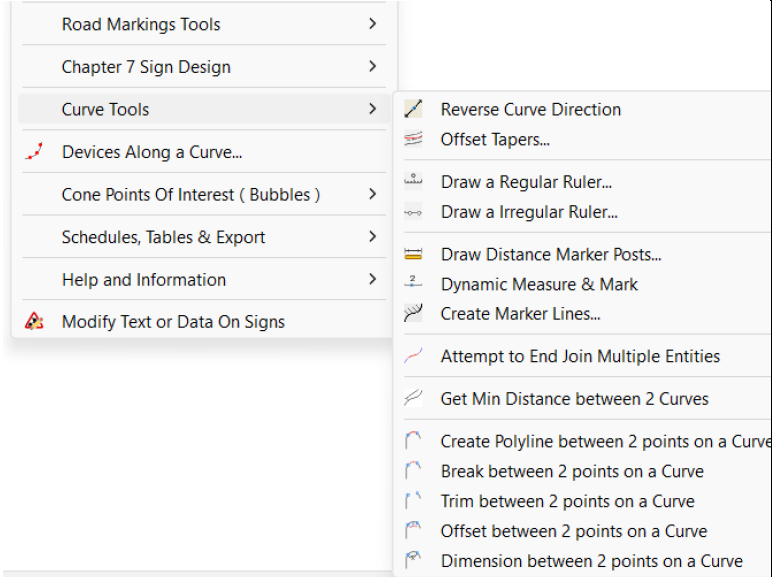
This function will attempt to link polyline elements on the drawing, you may load map drawings where kerbs or centrelines are made of multiple lines or polylines sections rather than one continuous polyline

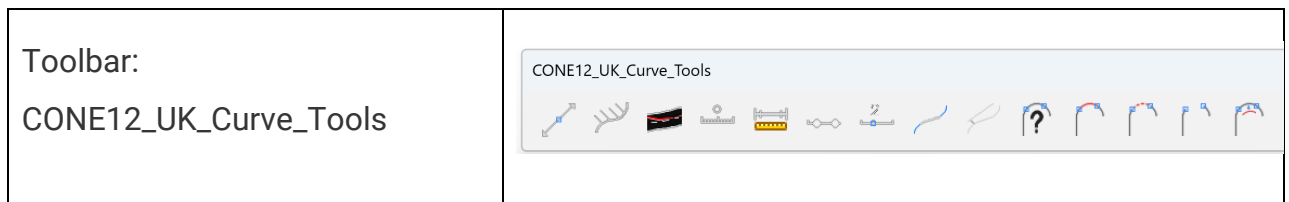
The program prompts you to select the entities, then links them together into one polyline.

The elements **MUST** have endpoint in the at the same coordinates - there cannot be a gap or overlap.

If the original elements are different colours, linetypes or on separate layers, they will be consolidated to a common single property

Curve Tools - Get Min. Distance Between 2 Curves

Command: CUKMIN_DIST_BETWEEN_2CURVES RIBBON: CONE12 Misc CURVE TOOLS	
CONE12UKBC Pull Down Menu	

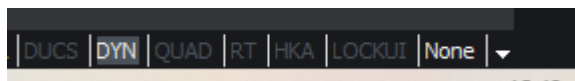


RIBBON: CONE11 Part 2: Curve Tools

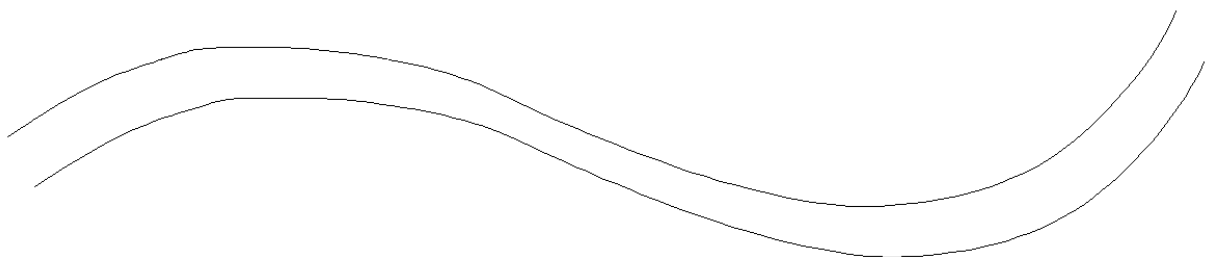
NO DIALOG BOX:

The program will draw and label the minimum distance between two elements on the drawing.

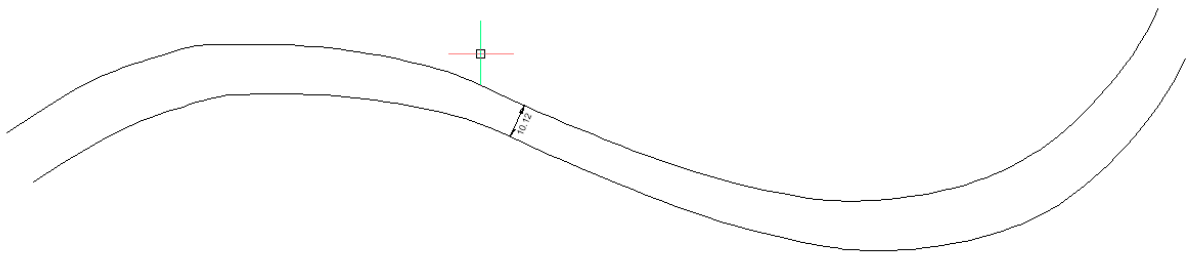
NOTE: if you just want the distance displayed and are using a later version of BricsCAD, toggle the **DYN** feature on the status bar to ON



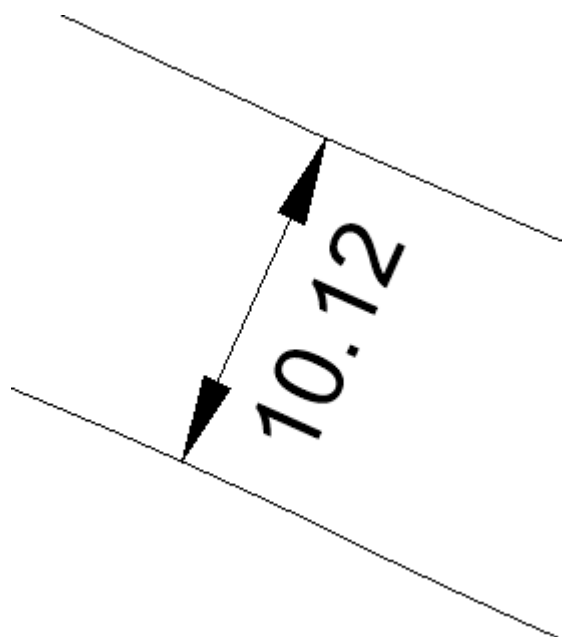
When using the CONE11 program option, select the first and second curves on the drawing as shown below:



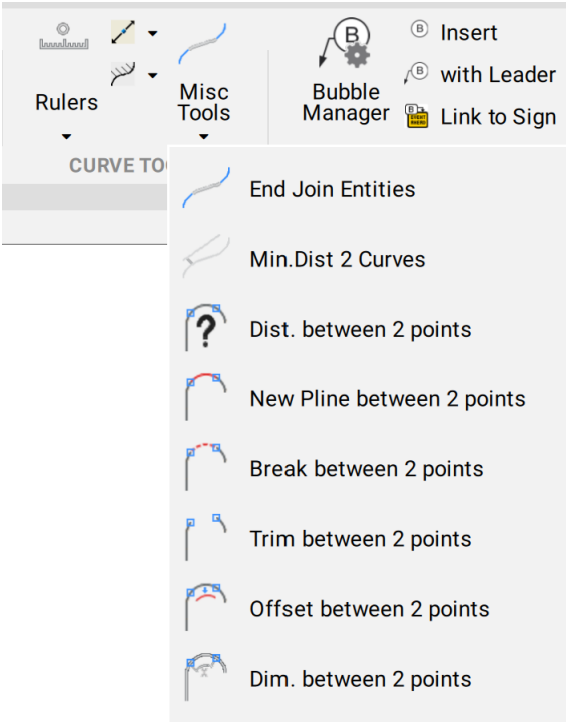
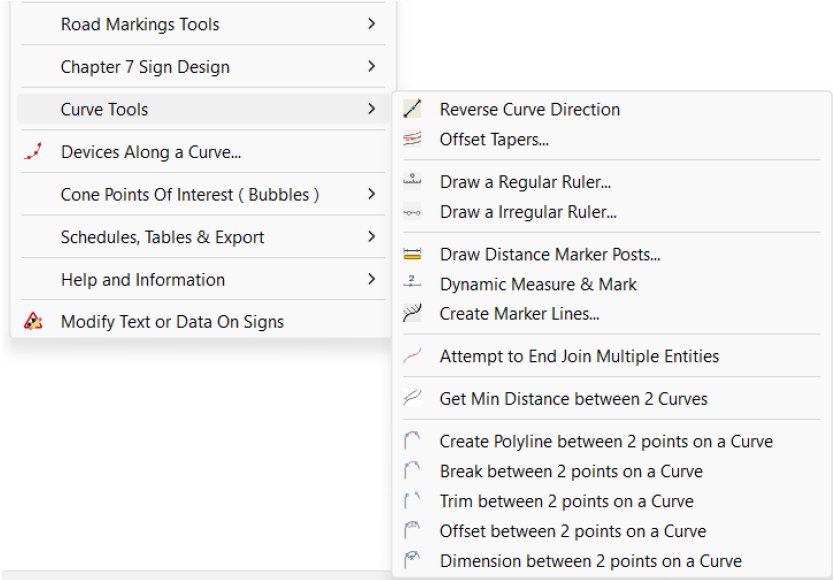
The program will calculate the closest points between the two curves and label the distance.

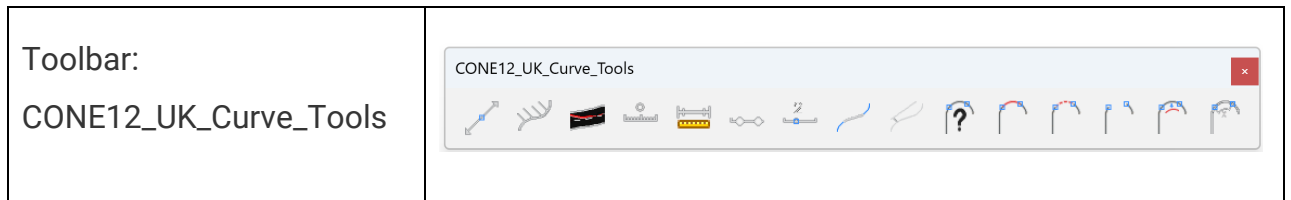


See below for a larger detail of the labelling



Curve Tools - Get Distance Between 2 points on a Curve

Command: CUK2PDISTANCE RIBBON: CONE12 Misc CURVE TOOLS	
CONE12UKBC Pull Down Menu	



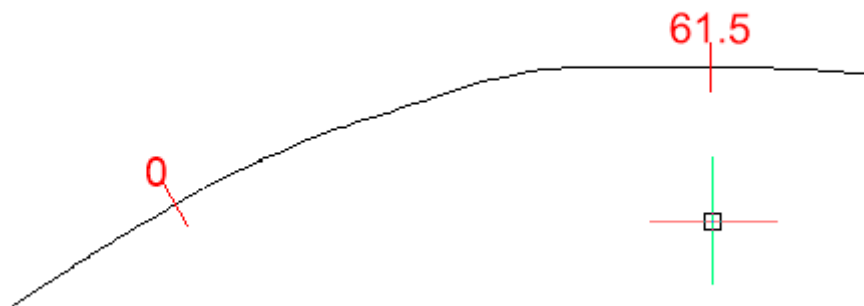
NO DIALOG BOX:

When using many of the tools in CONE11 the length along a polyline or curve is shown as you select a distance.

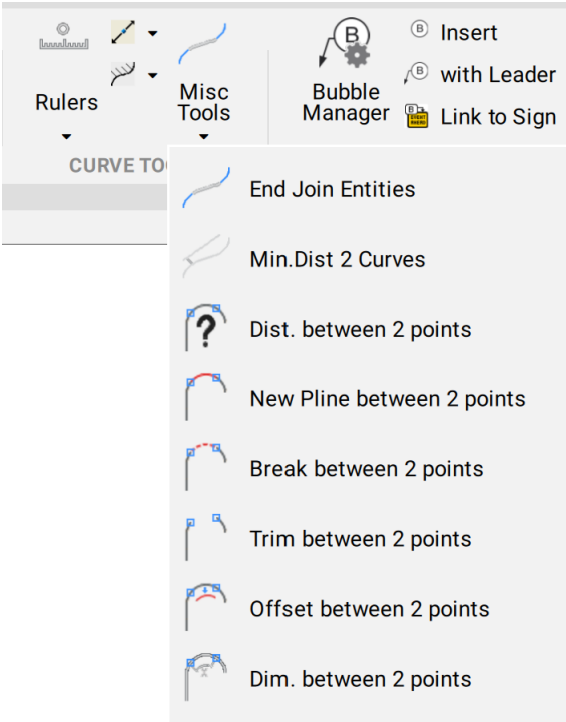
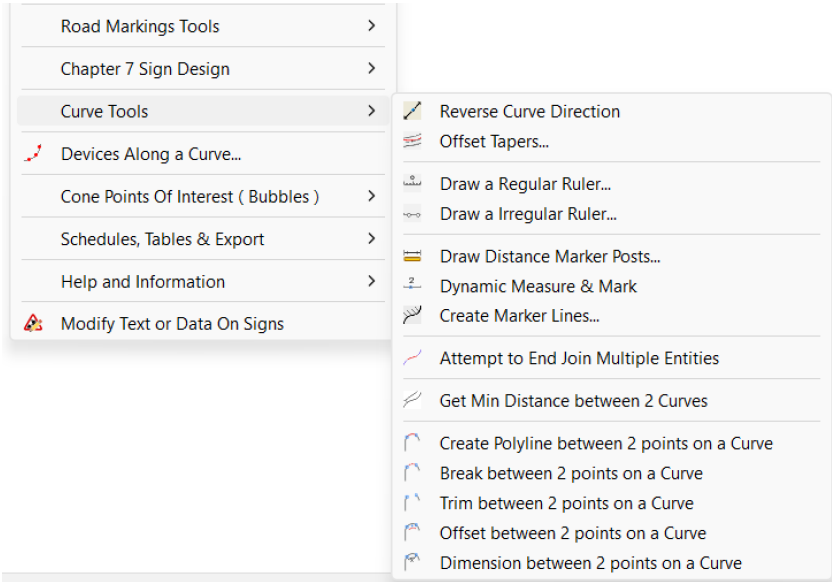
This program feature allows you to indicate a polyline or curve and a start point along that element, then as you move the mouse the distance is displayed on-screen

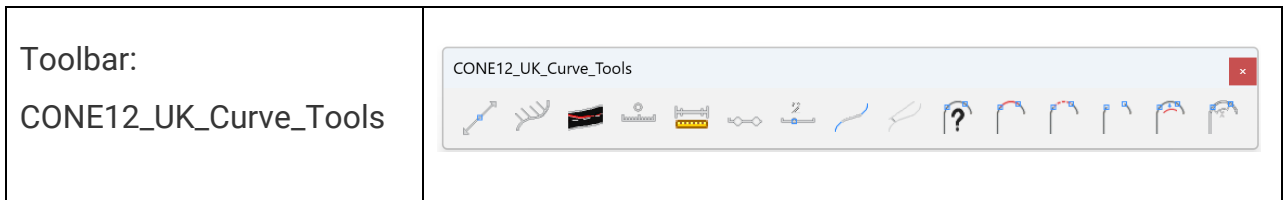
The resolution can be set in the general CONE11 Preferences dialog.

No labelling is added to the drawing with this option



Curve Tools - Create Polyline Between 2 points on a Curve

Command: CUK2PPOLY RIBBON: CONE12 Misc CURVE TOOLS	
CONE12UKBC Pull Down Menu	



NO DIALOG BOX:

This program option will create a polyline to overlap a section of existing curve on the drawing

NOTE: to ensure curves are followed correctly there may be more points on the new polyline than the original.

Command: **CUK2PPOLY**

Select a Continuous Curve (Polyline, Line, Arc, Circle or Spline)

First select using the mouse the polyline or element to use as a reference.

Pick First Point on Selected Curve:

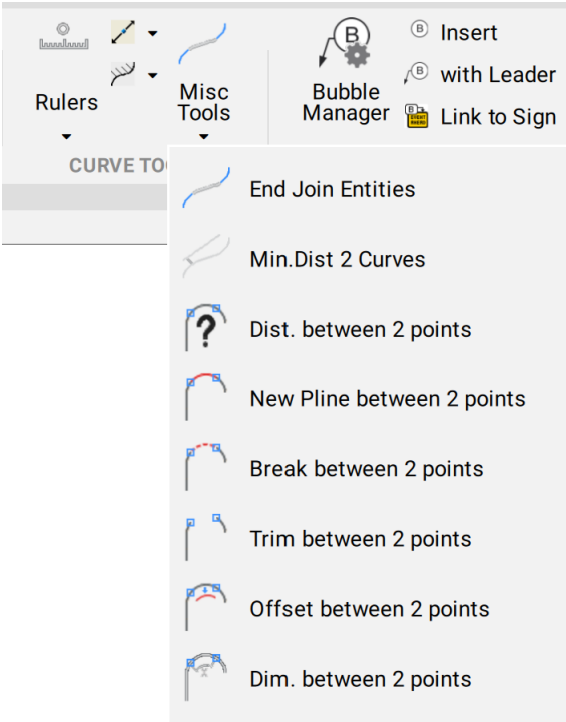
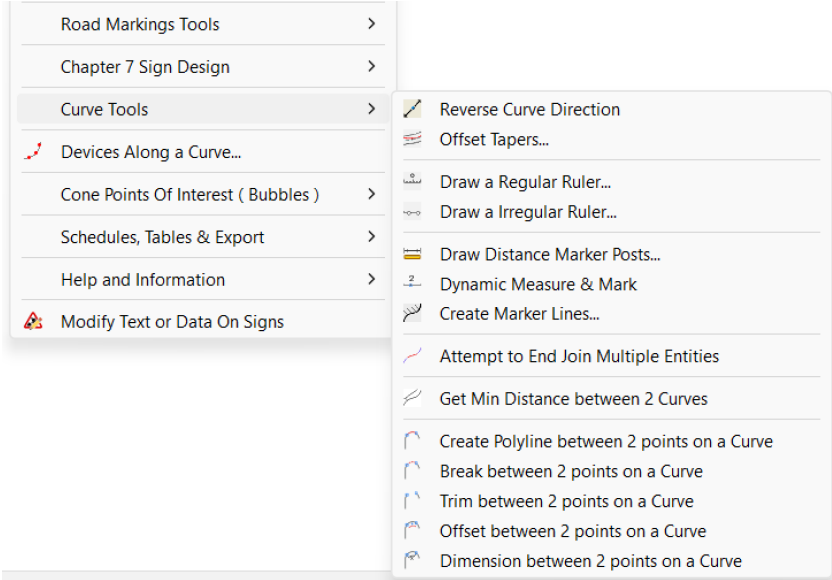
Select a point along the curve to start the new polyline element

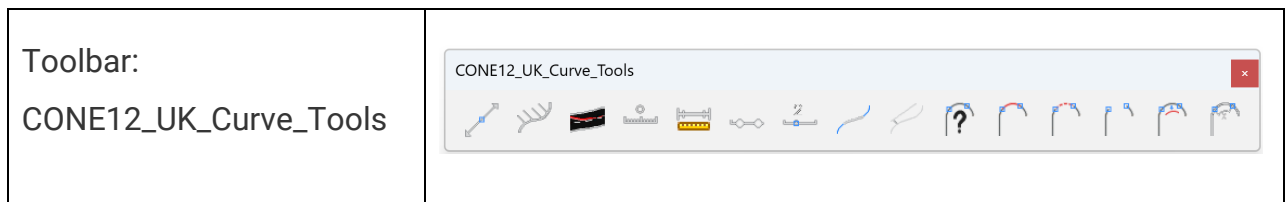
Pick Second Point on Selected Curve or Enter Distance Within Range [47.2 to -31] :

Select a point along the curve to end the new polyline element, or enter a value within the distance range shown in the command bar.

The new polyline segment will be drawn in the colour and on the same layer as the reference polyline/curve selected.

Curve Tools - Break Between 2 points on a Curve

Command: CUK2PBREAK RIBBON: CONE12 Misc CURVE TOOLS	
CONE12UKBC Pull Down Menu	



NO DIALOG BOX:

This program option allows you to simply break a polyline at two points, leaving three sections of polyline which can then be edited individually

Shown below is a sample polyline that has been smoothed showing the main vertex points in green.

Command: CUK2PBREAK

CUK2PBREAK: Select a Continuous Curve (Polyline, Line, Arc, Circle or Spline)

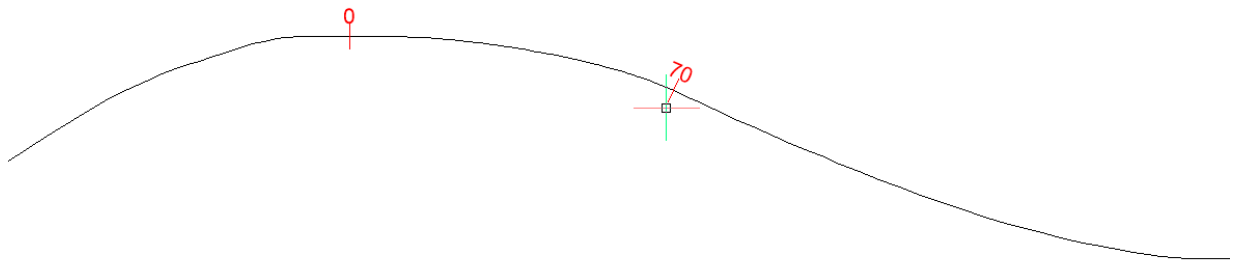
Select the polyline as shown in the screen grab above

Pick First Point on Selected Curve:

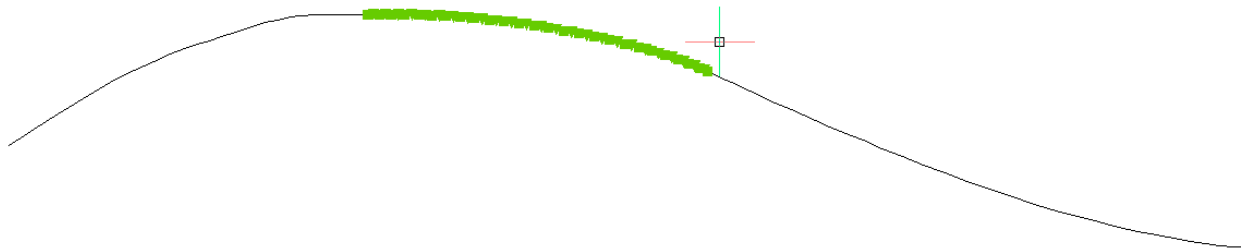
Select using the mouse the start point where the break is to be positioned, a datum marked a zero will be displayed as below...

Pick Second Point on Selected Curve or Enter Distance Within Range [39.5 to -38.7] :

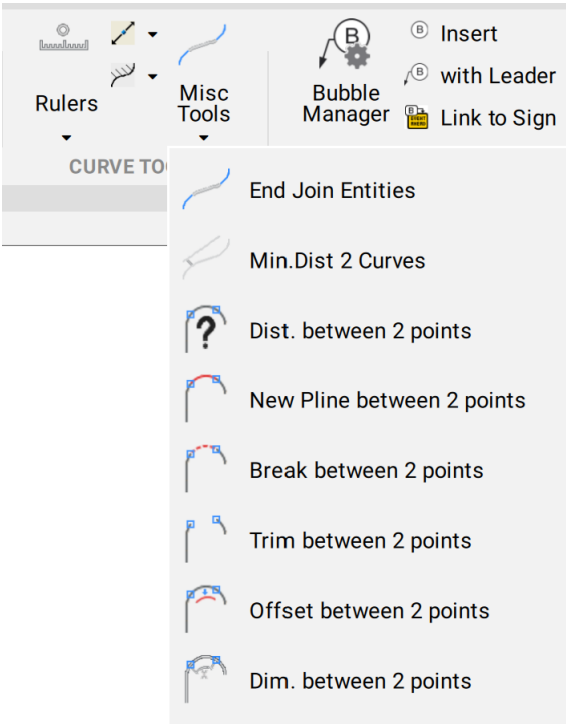
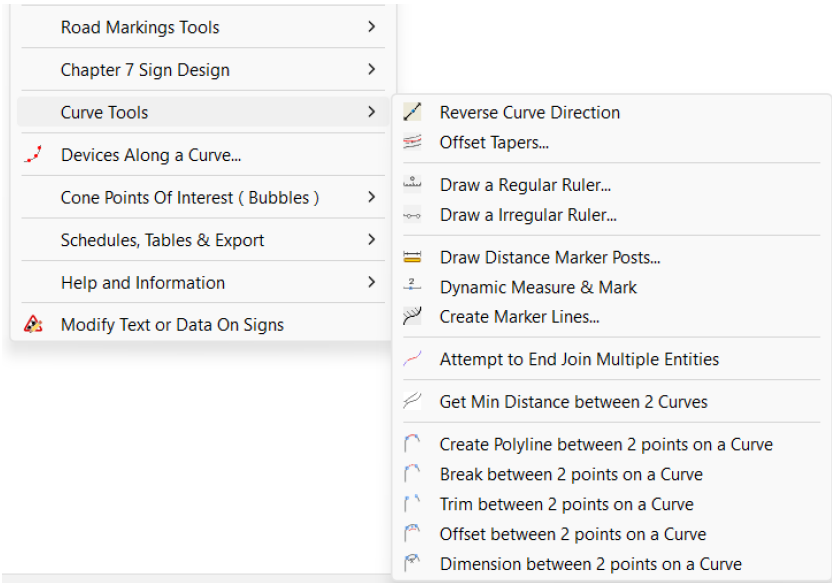
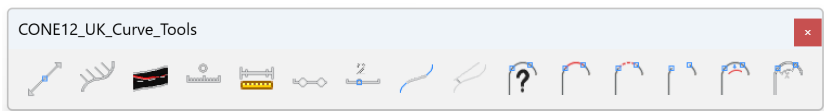
Pick the second point by either clicking with the mouse, or typing a value in the range displayed in the prompt



The original polyline will be broken into three segments, the new segment may contain more vertex points to ensure it follows the curve shape of the original element.



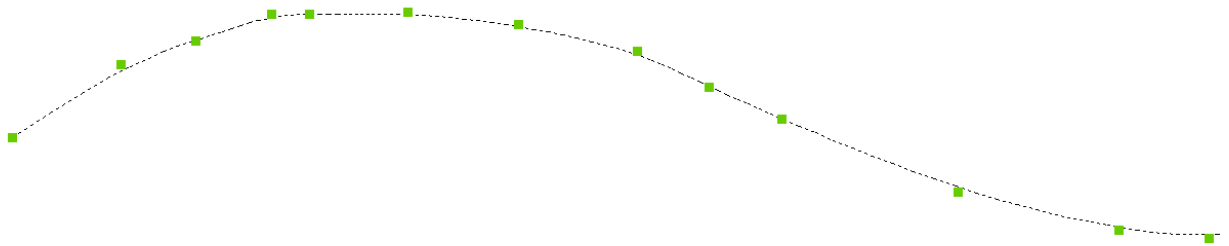
Curve Tools - Trim Between 2 points on a Curve

Command: CUK2PTRIM RIBBON: CONE12 Misc CURVE TOOLS	
CONE12UKBC Pull Down Menu	
Toolbar: CONE12_UK_Curve_Tools	

NO DIALOG BOX:

This program option is similar to the previous feature but breaks a polyline at two points, leaving two sections of polyline and a gap between them.

Shown below is a sample polyline that has been smoothed showing the main vertex points in green.



Command: CUK2PTRIM

CUK2PTRIM: Select a Continuous Curve (Polyline, Line, Arc, Circle or Spline)

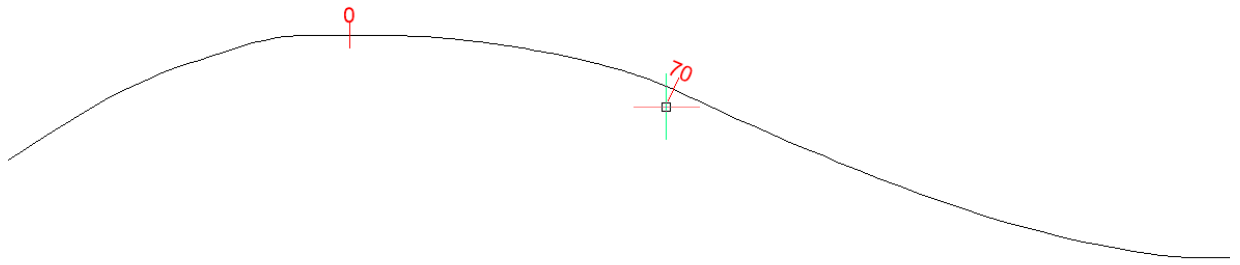
Select the polyline as shown in the screen grab above

Pick First Point on Selected Curve:

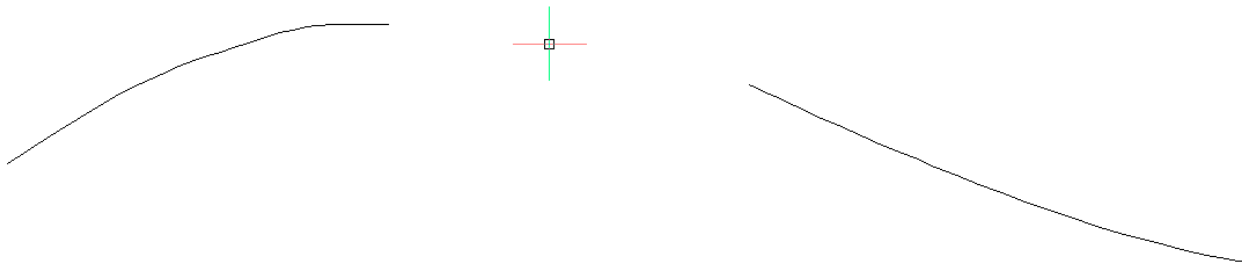
Select using the mouse the start point where the break is to be positioned, a datum marked a zero will be displayed as below...

Pick Second Point on Selected Curve or Enter Distance Within Range [39.5 to -38.7] :

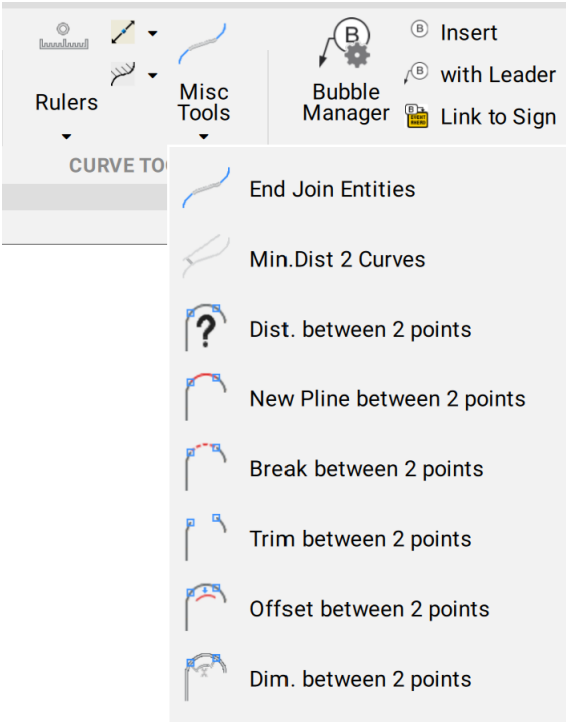
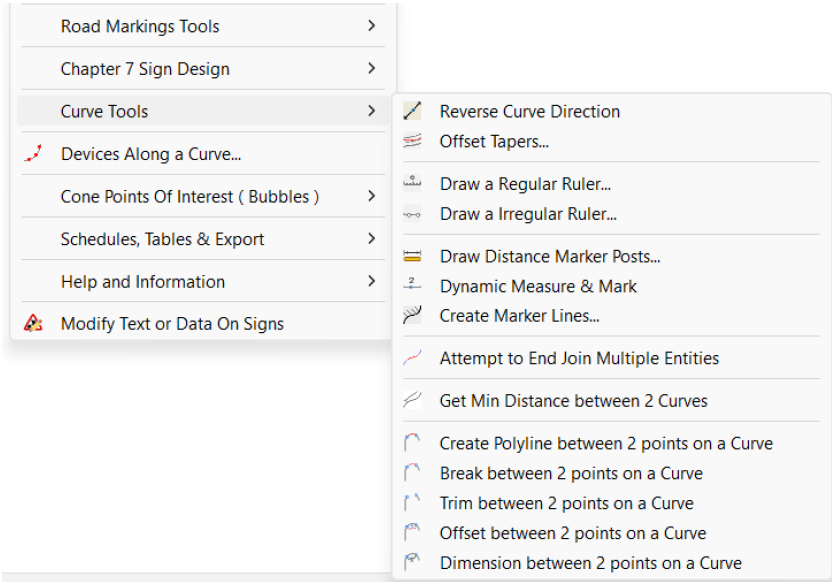
Pick the second point by either clicking with the mouse, or typing a value in the range displayed in the prompt



The original polyline will be broken into two segments, the selected central section will be deleted leaving a gap.



Curve Tools - Offset Between 2 points on a Curve

Command: CUK2POFFSET RIBBON: CONE12 Misc CURVE TOOLS	
CONE12UKBC Pull Down Menu	

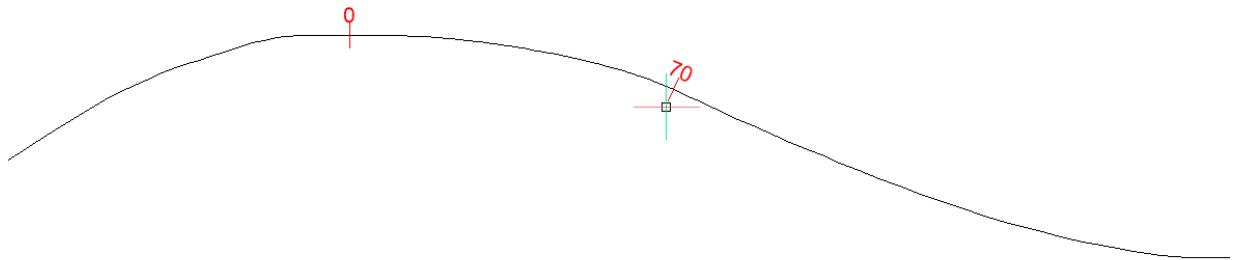
Toolbar:

CONE12_UK_Curve_Tools



NO DIALOG BOX:

This program feature will create an offset polyline along part of a curve.



Command: CUK2POFFSET

C2POFFSET: Select a Continuous Curve (Polyline, Line, Arc, Circle or Spline)

Select the polyline or curve object on the drawing

Pick First Point on Selected Curve:

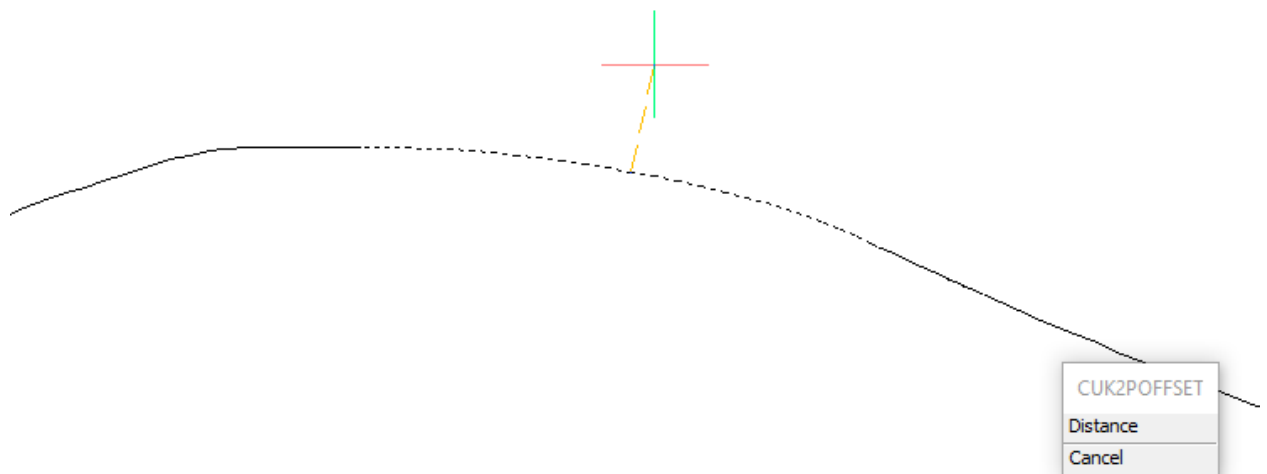
Pick the point where you wish the offset to start using the mouse cursor

Pick Second Point on Selected Curve or Enter Distance Within Range [48.2 to -15.3] :

Pick the end point using the mouse or type a value at the command line - the valid range is displayed in the prompt as shown on the line above.

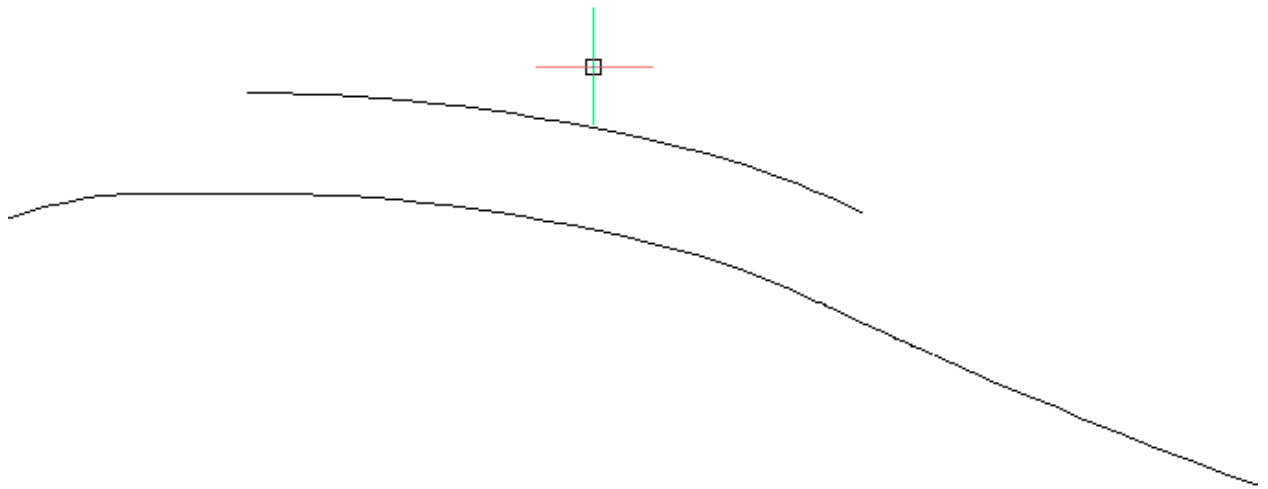
Offset: Distance/<Through point>:

Finally, enter the offset distance by selecting with the mouse cursor or typing a value as shown below

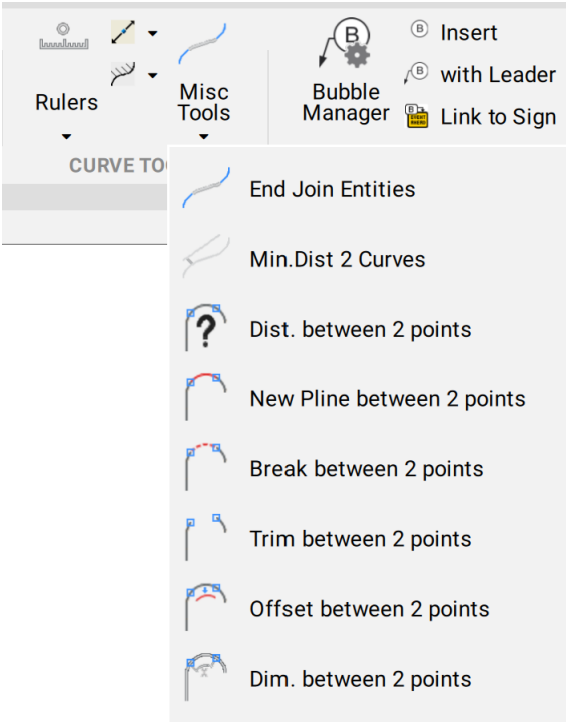
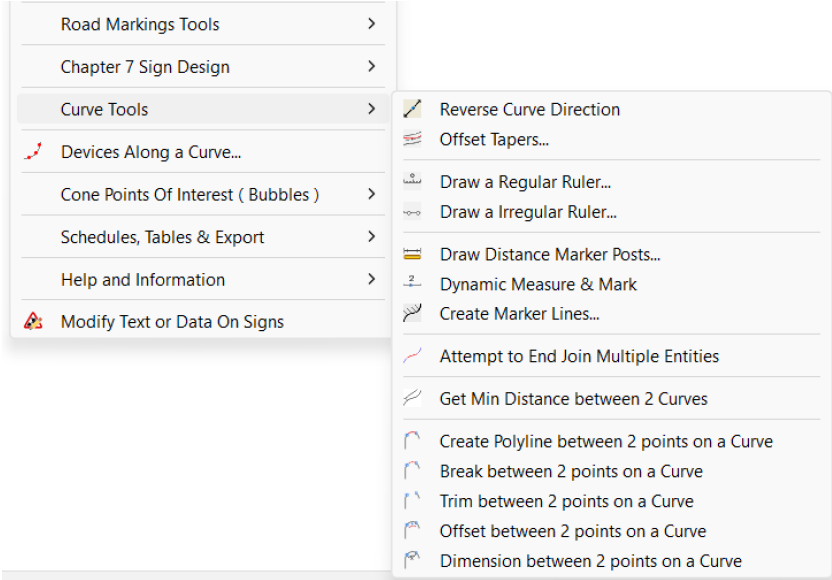


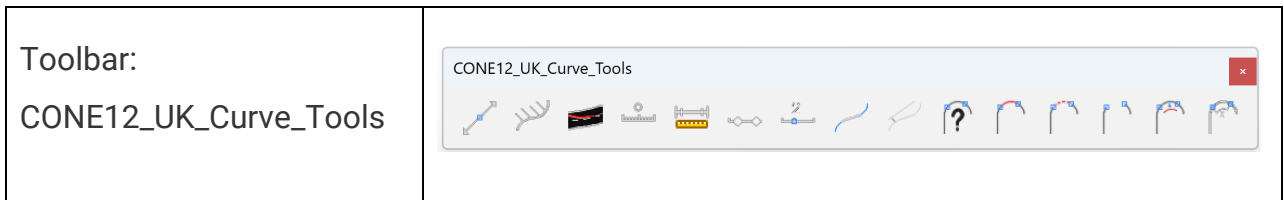
The new polyline segment is drawn parallel to the original curve between the start and end points as shown below

The new line is drawn in the same colour and on the same layer as the original reference object.



Curve Tools - Dimension Between 2 points on a Curve

Command: CUK2PDIM RIBBON: CONE12 Misc CURVE TOOLS	
CONE12UKBC Pull Down Menu	



RIBBON: CONE11 Part 2: Curve Tools

NO DIALOG BOX:

This program option will draw and label a distance between two points along a curve.

After selecting the command, you are prompted to first select the curve to measure.

Command: **CUK2PDIM**

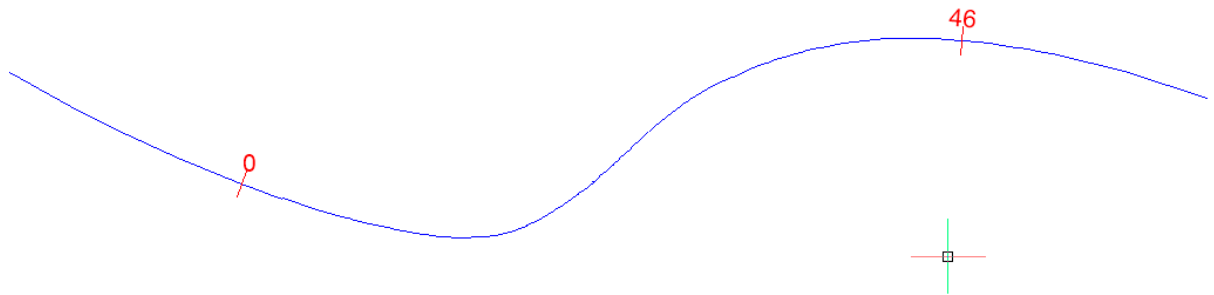
C2PDIM: Select a Continuous Curve (Polyline, Line, Arc, Circle or Spline)

You then indicate the START point of the distance to be measured.

Pick First Point on Selected Curve:

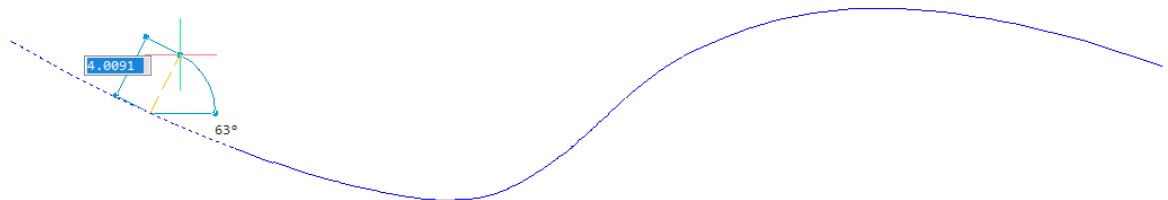
You then either indicate the END point of the distance to be measured, or type a distance to be labelled,
the limits of valid values for the selected polyline are displayed on the CAD command line.

Pick Second Point on Selected Curve or Enter Distance Within Range [69 to -24.7] :

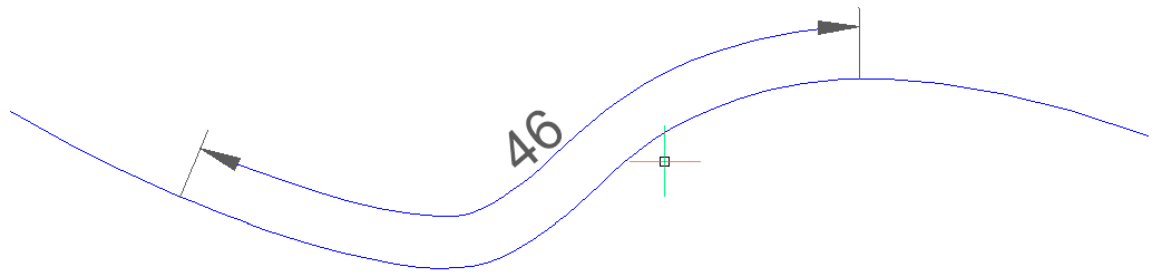


Then you must select the distance from the line to draw the dimension

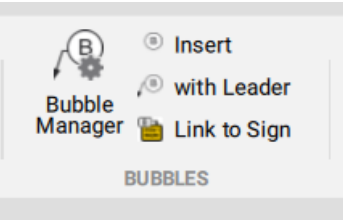
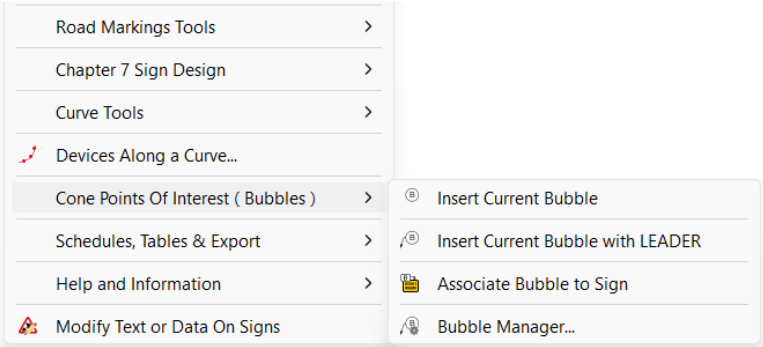
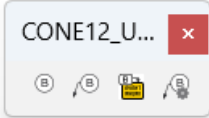
Specify Dimension Offset:



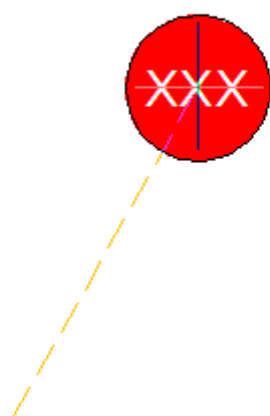
The label entities are drawn using polyline elements on the current drawing layer, the dimension line parallel to the reference curve is drawn on the same layer and colour as the original reference curve (shown blue below)



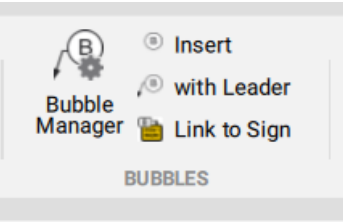
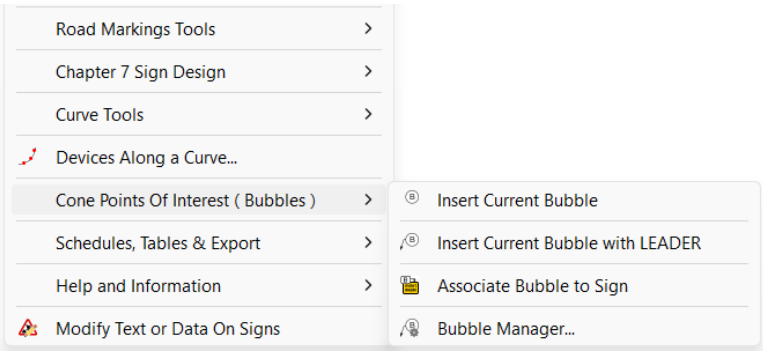
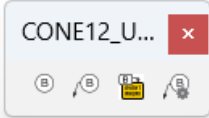
Cone Points of Interest (Bubbles) - Insert Current Bubble

Command: CUKBUBBLE RIBBON: CONE12 Misc BUBBLES	
CONE12UKBC Pull Down Menu	
TOOLBAR CONE12_UK_Bubbles	

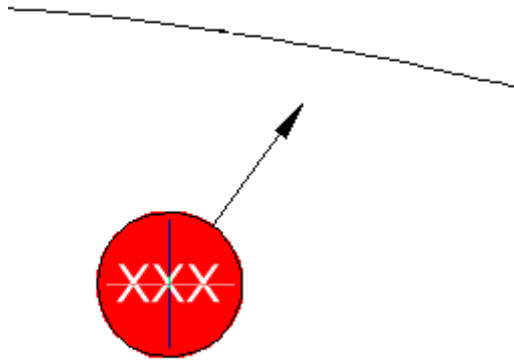
NO DIALOG BOX:



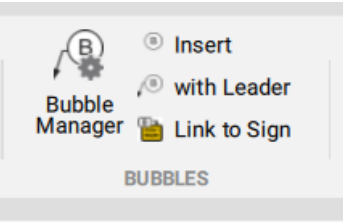
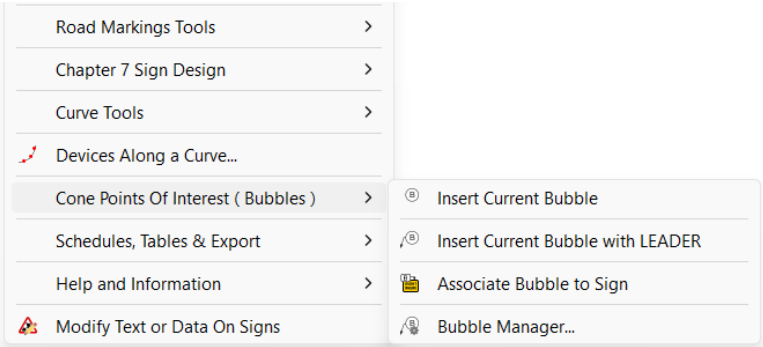
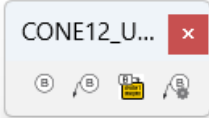
Cone Points of Interest (Bubbles) - Insert Current Bubble with LEADER

Command: CUKBUBBLELEADER RIBBON: CONE12 Misc BUBBLES	
CONE12UKBC Pull Down Menu	
TOOLBAR CONE12_UK_Bubbles	

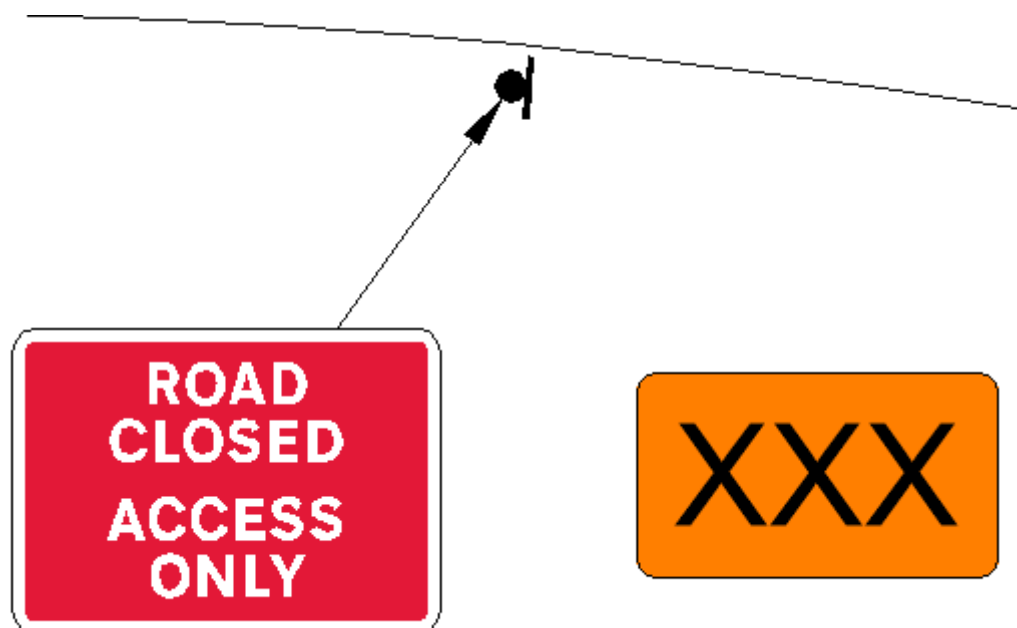
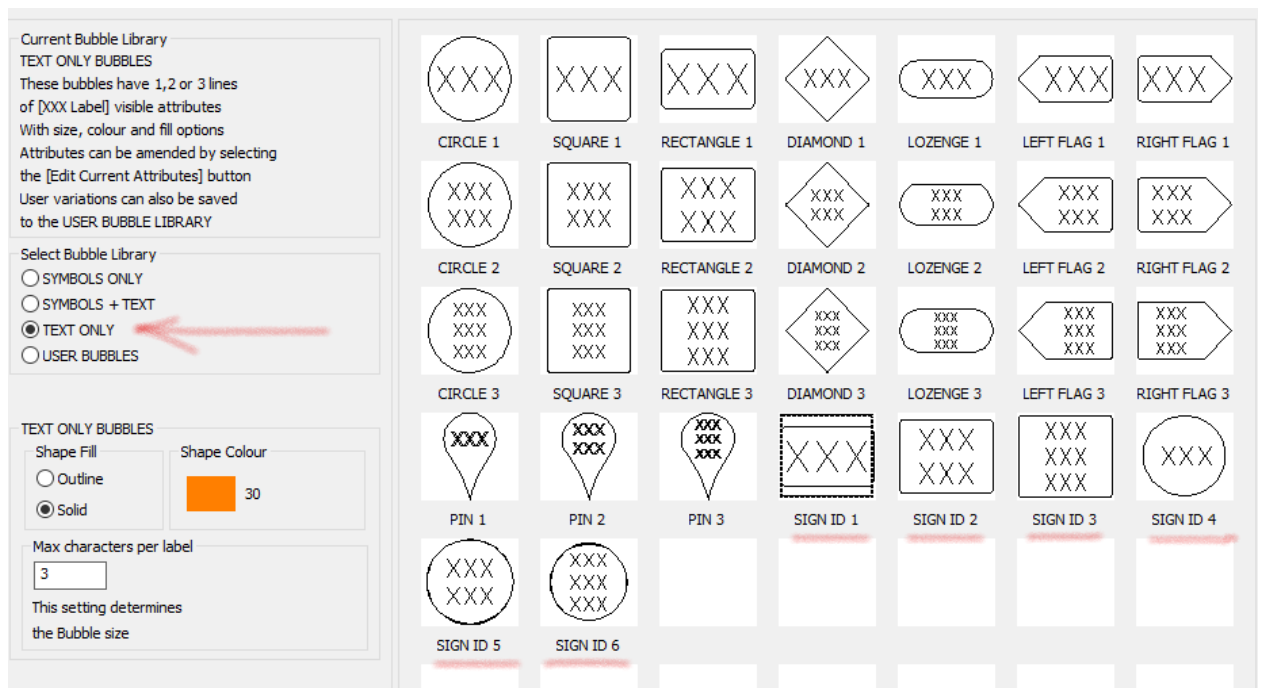
NO DIALOG BOX:



Cone Points of Interest (Bubbles) - Associate Bubble to Sign

Command: CUKBUBBLE2SIGN RIBBON: CONE12 Misc BUBBLES	
CONE12UKBC Pull Down Menu	
TOOLBAR CONE12_UK_Bubbles	

Dialog Box:

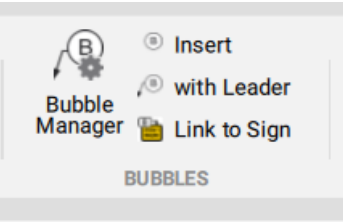
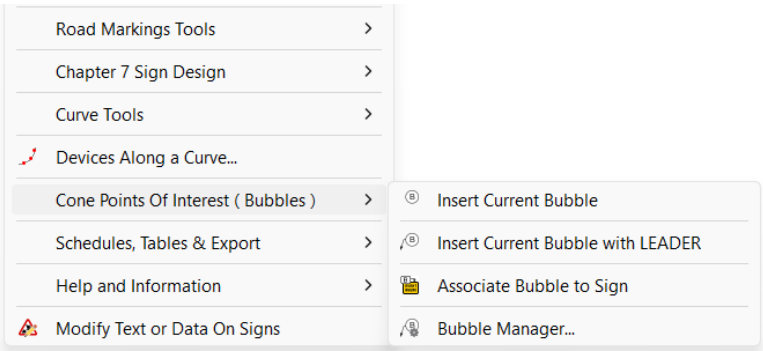
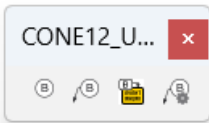


Associate Sign ID Bubble to Sign: Select the Bubble

Associate Bubble to Sign : Now Select the Sign

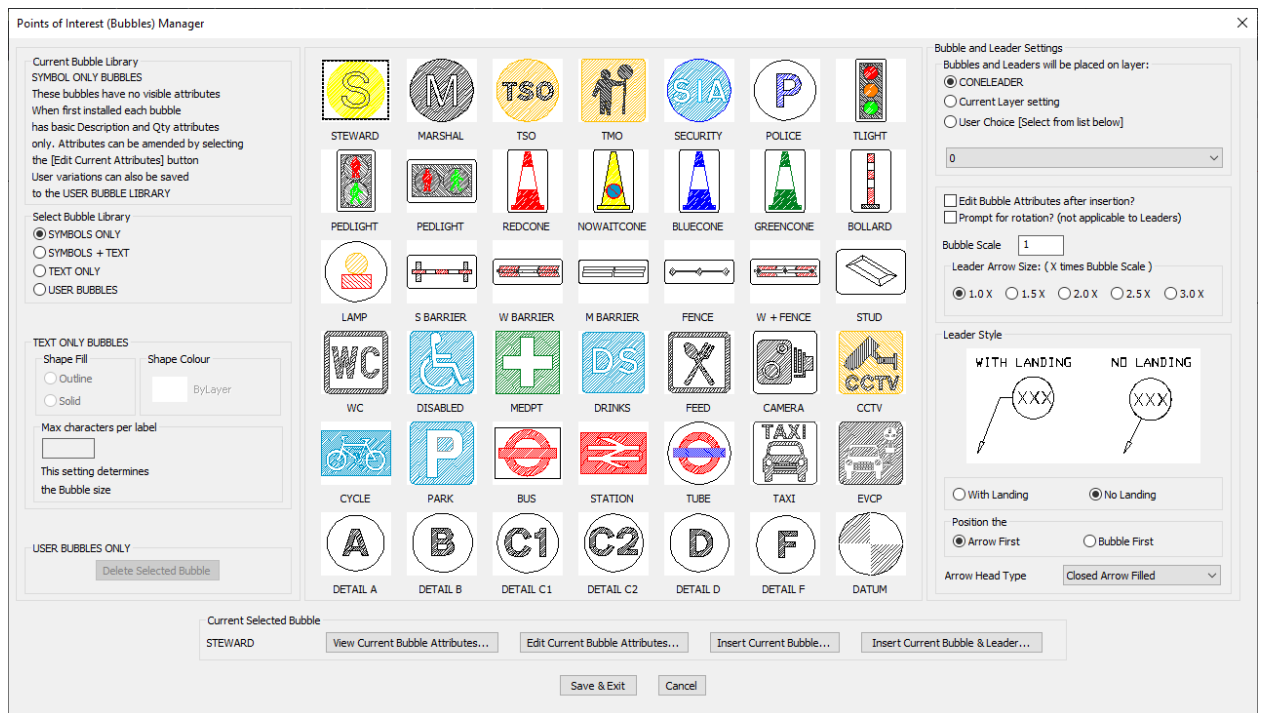
OK : Bubble now associated with sign

Cone Points of Interest (Bubbles) - Bubble Manager

Command: CUKBUBBLEMANAGER1 RIBBON: CONE12 Misc BUBBLES	
CONE12UKBC Pull Down Menu	
TOOLBAR CONE12_UK_Bubbles	

RIBBON: CONE11 Part 2: Bubbles

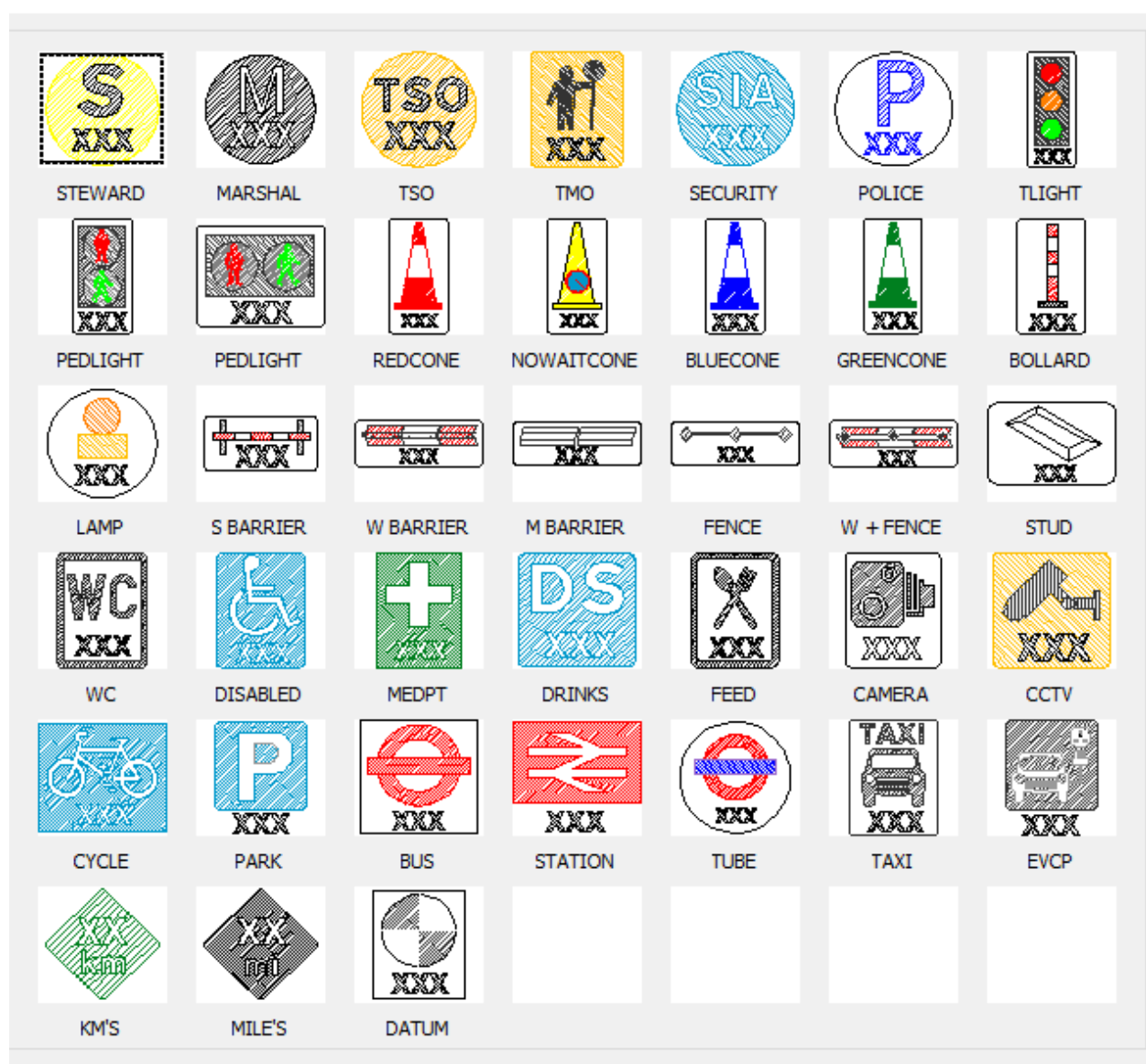
DIALOG BOX:



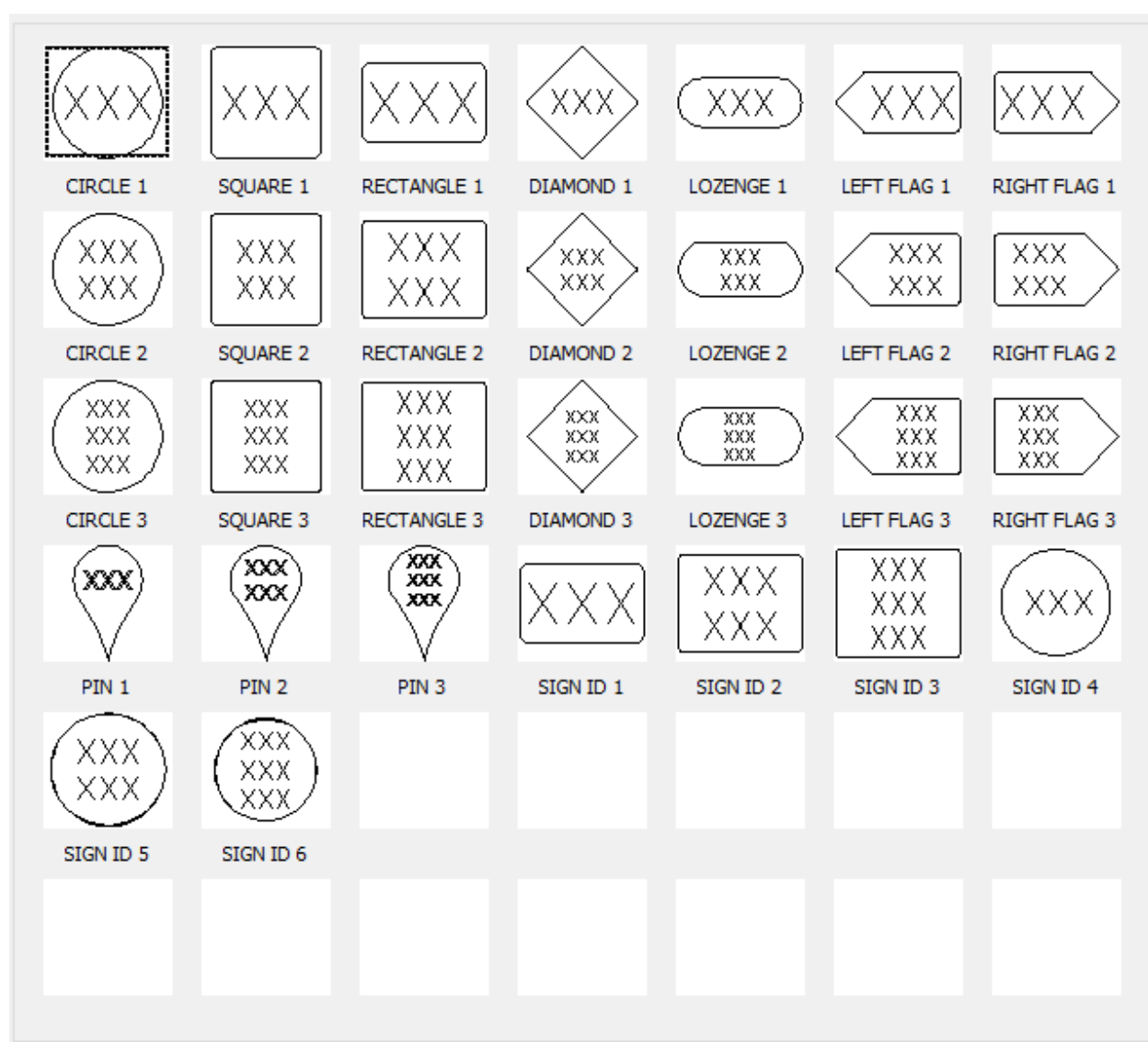
SYMBOLS ONLY

See screen grab above...

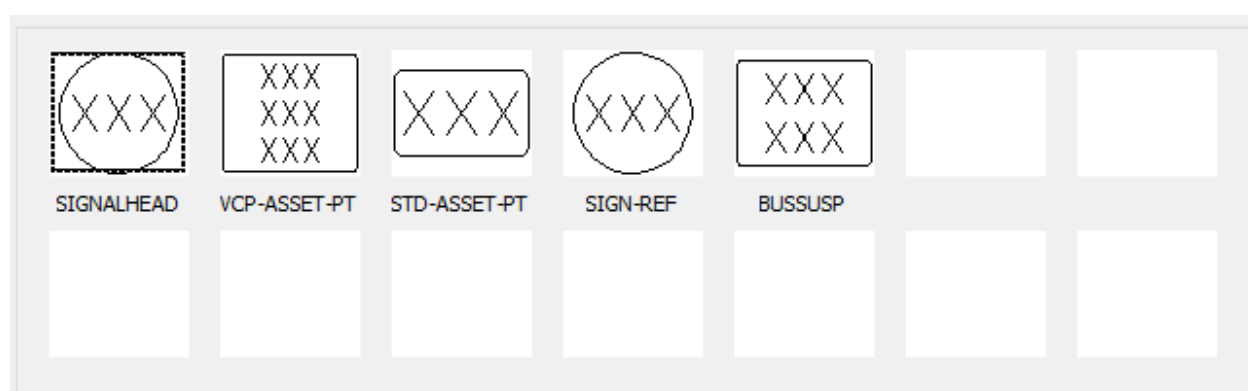
SYMBOLS + TEXT



TEXT ONLY



USER BUBBLES



View Current Bubble Attributes

Current Bubble Attributes

×

The attributes for the current Bubble are shown below
To add/remove or modify the attributes close this dialog
and select the [Edit Current Bubble Attributes] button

Tag	Prompt	Default Value
LB1	Label 1	XXX
QTY	Qty	1
DES	Descpn	Steward
RESOURCE	Resource	
ID	ID	
CONTACT	Contact	
TEL	Tel	
TASK	Task	
REMARKS	Remarks	
SECTOR	Sector	
LOCTN	Location	
POSTN	Position	
DATE1	Start Date	
DATE2	End Date	
TIME1	Start Time	
TIME2	End Time	

OK

Cancel

Edit Current Bubble Attributes

CONE Bubble / Label Manager

The Name of the Bubble Block that will created or amended (Prefix + Suffix)
Prefix (Fixed)
CBUB-T-STEWARD_
Suffix (User defined)
001
Check Block Name
Make Unique

Attributes can be included or removed by selecting/unselecting the Inc? check box next to each
Note! The Label and Qty attributes are fixed, you CANNOT unselect these
You may change the Prompt and the Default Values of all attributes

Fixed VISIBLE Label Attributes if Applicable

Inc?	Attribute	Prompt	Def Value
☒	LB1	Label 1	Label 1
☐	LB2	Label 2	
☐	LB3	Label 3	
☒	QTY	Qty	1

Who? Invisible Attribute Suggestions

Inc?	Attribute	Prompt	Def Value
☒	RESOURCE	Resource	Resource
☒	ID	ID	ID
☒	CONTACT	Contact	Contact
☒	TEL	Tel	Tel
☒	TASK	Task	Task
☐	STEWID	Stewards	
☐	MARSL	Marshals	
☐	TMO	TMOs	

What? Invisible Attribute Suggestions

Inc?	Attribute	Prompt	Def Value
☒	DES	Descpn	Descpn
☒	TITLE	Title	Title
☐	PROJECT	Project	
☐	EVENT	Event	
☒	REMARKS	Remarks	Remarks

Where? Invisible Attribute Suggestions

Inc?	Attribute	Prompt	Def Value
☒	SECTOR	Sector	Sector
☒	LOCTN	Location	Location
☒	POSTN	Position	Position
☐	MOUNT	Mounting	
☐	PHASE	Phase	
☐	PCODE	Post Code	
☐	OSGRID	OS Grid Ref	
☐	OSCOORD	OS Coord	
☐	GPS	GPS Lat/Lon	
☐	OSGB36	OSGB36 Lat/Lon	

More Attribute Suggestions
When... Specification...
Events... Other...

Max No of characters per label
This value determines the size of the bubble

OK Cancel

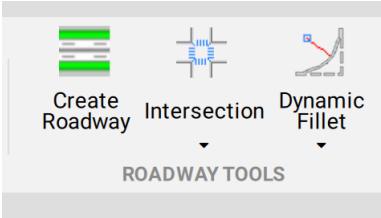
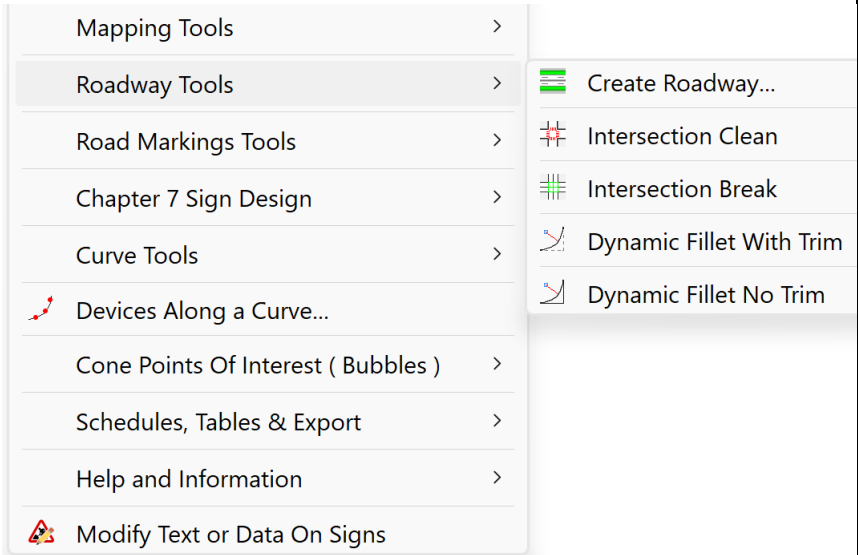
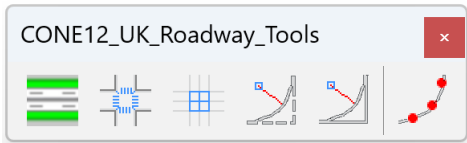
BricsCAD

CBUB-T-STEWARD_001
This is a STD system bubble, If you make any changes to the attributes then the bubble will be updated and any instances of this bubble or other members of this bubbles family in the current drawing will also be updated
Future use of this bubble in new drawings will also reflect the changes
NOTE:
If you change the Suffix to anything other than 001 then this bubble will be saved as a user bubble to the USER BUBBLE LIBRARY
Existing User Bubbles with the same filename will be overwritten

OK

If you have a library of Ordnance Survey DRAWING tiles these can be loaded in a similar manner to the raster tiles described previously.

Roadway Tools – Create Roadway

Command: CUKDF RIBBON: CONE12 Roads ROADWAY TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR CONE12_UK_Roadway_Tools	

The primary task of the Create Roadway tool is to enable easy insertion of carriageway lines into the current drawing

CONE 12 UK: Draw a Roadway

<< Left Hand Lanes <<

>> Right Hand Lanes >>

Standard Configurations

- Single Carriageway - 3 Lane
- Single Carriageway - 4 Lane
- Dual Carriageway - 2/2 No Shoulder
- Dual Carriageway - 3/2 No Shoulder
- Dual Carriageway - 3/3 No Shoulder
- Dual Carriageway - 2/3 No Shoulder
- Dual Carriageway - 4/2 No Shoulder

Mode (Lane Widths)

☒ Actual Size ☐ Schematic

Left Hand Lanes

Footpath or Verge
Width ☐ Include?

Hard Shoulder
Width ☐ Include?

Traveled way
Lanes Width

Lane Markings...
1005.1 : Mark=2 Gap=7

Edge Markings...
NONE
None

Centre of Carriageway

Not Specified
☐

Simple
☒ Width

Hatched
☐  Width

Centre Line Marking
☐ 
1013-A : Double

Right Hand Lanes

Footpath or Verge
Width ☐ Include?

Hard Shoulder
Width ☐ Include?

Traveled way
Lanes Width

Lane Markings...
1005.1 : Mark=2 Gap=7

Edge Markings...
NONE
None

Road Creation Method

☐ Select pre-drawn curve (Polyline, Line, Circle, Arc or Spline)
☒ Draw on screen - (Straight and Curved segments)

Carriageway Edge Alignment

☐ Left ☒ Centre ☐ Right

☐ Create Group? ☐ Add End Caps?

OK Cancel

Standard Configuration

The list on the top right of the dialog allows you to select from a wide range of common carriageway layouts. The number of lanes, lane widths and markings are all

configurable or you can accept the defaults shown. and Working from left to right there are three list boxes used for sign browsing

Mode (Lane Widths) Default value is Actual Size

The two options “**Actual Size**” and “**Schematic**” allow you to draw the lanes at the specified sizes, or alternatively, just the number of lanes in a standard schematic layout.

Left Hand Lanes

These options are duplicated for the **Right Hand Lanes** schematic layout.

Footpath or Verge Default value is OFF

To draw, this item, check the **Include** check-box, you can then change the default width if using Actual Size mode.

Hard Shoulder Default value is ON

As with the Verge option, this can be turned on or off using the **include** checkbox, and a width specified.

Traveled Way

The number of lanes will be preset when choosing a **Standard Configuration**, but you can change the lanes, their widths (they will all be drawn the same width) and edit the lane markings – either Continuous lines, or select from the dashed patterns available.

Edge Markings... Default value is NONE

As with the lane markings, you can select NONE, Continuous or a variety of dash patterns. These will be drawn on the nearside of the inside lane and offside of the outside lane.

Centre of Carriageway

There are four methods of displaying this section of the Roadway:

Not Specified – check the box, and NO centre will be drawn for the carriageway

Simple – Two continuous lines will be drawn, a specified width apart.

Hatched – As above, two lines drawn a specified width apart, but the area between will also be diagonally hatched.

Centre Line Marking – The final option, allows you to choose from a list of available line marking patterns.

Carriageway Edge Alignment *Default value is CENTRE*

As you draw the carriage way you can align the new road to the **Left, Centre** or **Right** of points you indicate.

Create Group Default value is OFF

The carriageway is drawn as individual lines. Checking this box will group them together to allow you to move/copy or erase them as a single entity.

Add End Caps Default value is OFF

Carriageway lines are drawn parallel to each other, the ends of the carriageway can be closed by checking this option box.

Road Creation Method Default mode is Draw on screen

Select pre-drawn curve

Check this option to draw you specified carriageway along an existing path on the drawing.

Draw on screen

Check this option and you can draw individual segments of roadway that will be linked together into continuous polyline entities. Whilst drawing the roadway, there are the key options:

Line

The default mode will drawn straight line segment, pressing **L** whilst drawing returns you to this mode.

Line Option Keywords

Distance: Key D or d (enter a fixed length for the next segment)

Angle: Key A or a (enter the angle for the next segment to be drawn)

Undo: Key U or u (remove the previous segment)

Ortho: Key O or o (lock the segments to vertical or horizontal directions)

Curve

Pressing **C** whilst drawing turns you to this mode, where the road will be drawn tangentially to the previous segment and through the mouse pointer location using a circular curve.

Radius

Pressing **R** whilst drawing turns you to this mode, initially you will be asked to enter a radius. Then circular curved sections will be drawn using that value. You can also use the sub-option key **A** for angle where you can enter an angle (in degrees) that you wish to draw at the previously specified radius, your only option then is to indicate with the mouse whether the carriageway is to curve to the left or the right.

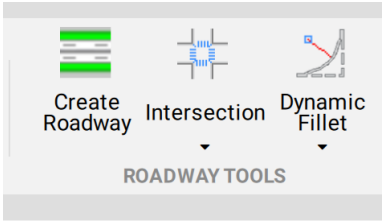
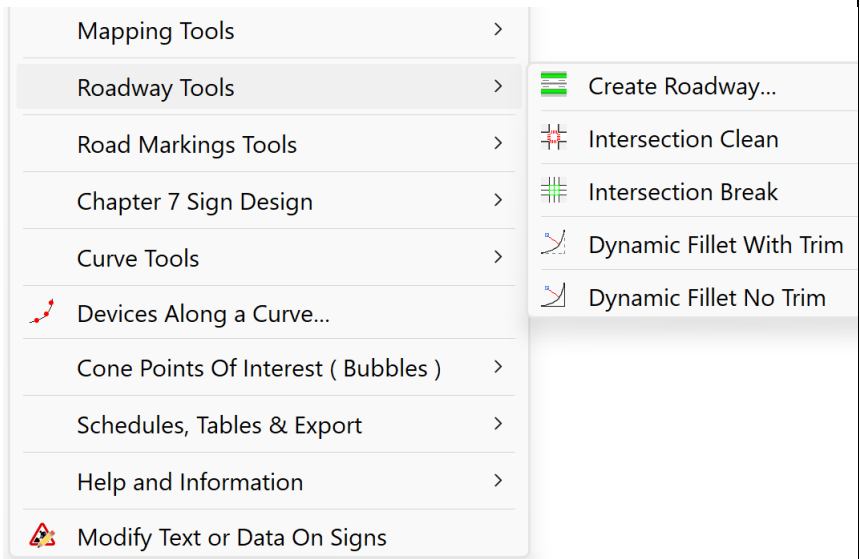
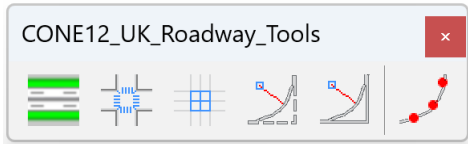
All Mode Option Keywords

Esnap: Key E or e (toggles the entity snap mode ON/OFF – usually done using F3, this function requires a different key)

Settings: Key S or s (to set the current entity snap to allow you to lock to say end of another road)

Merge: Key M or m (to merge the current line with the edge of an existing carriageway – all new carriageway lines will be extended to the edge of the selected entity)

Roadway Tools – Intersection Clean

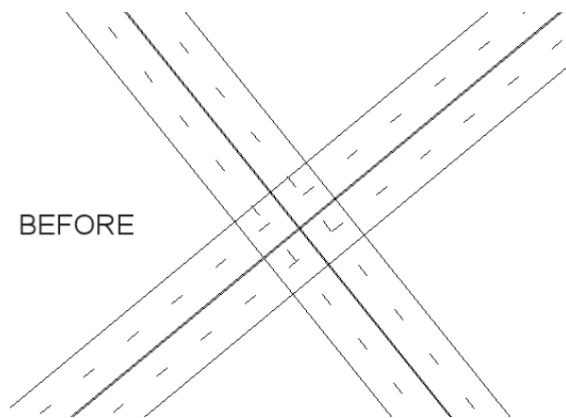
Command: CUKDF RIBBON: CONE12 Roads ROADWAY TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR CONE12_UK_Roadway_Tools	

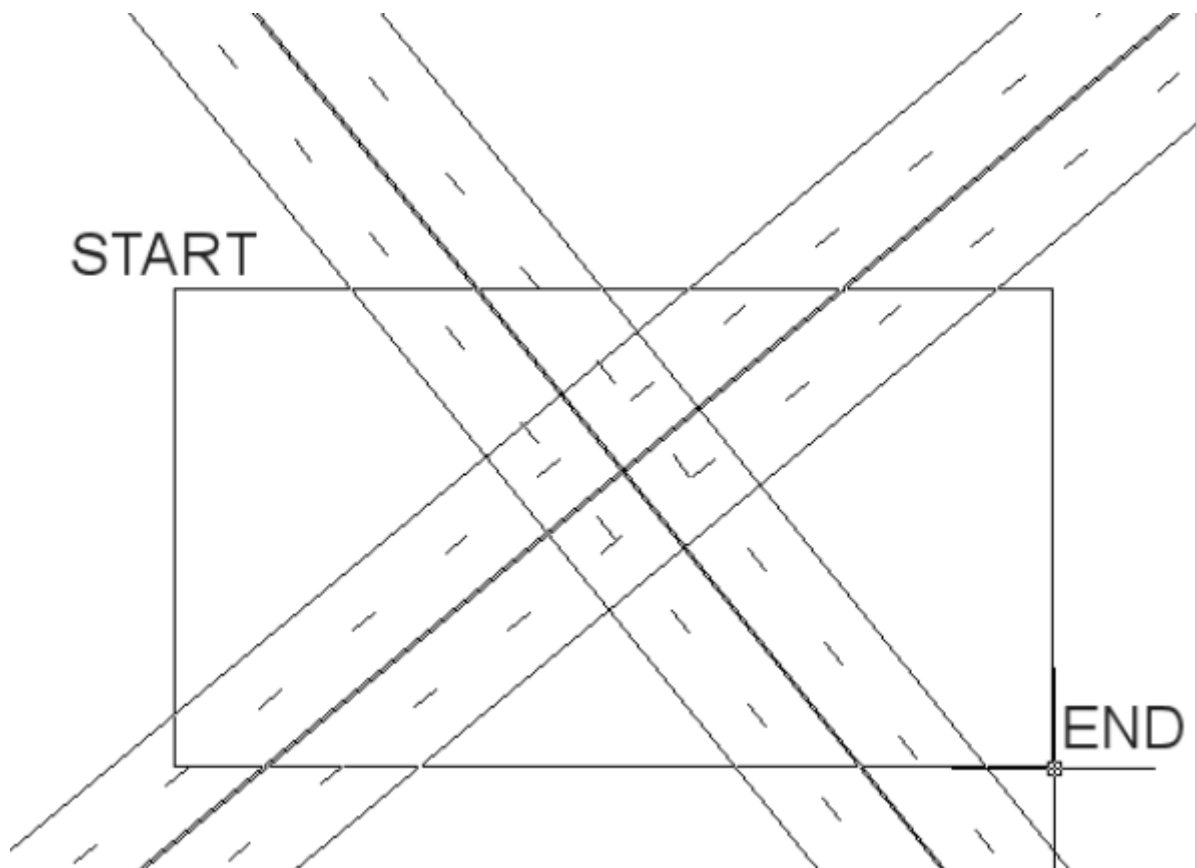
Once a number of Carriageway lines are drawn on the drawing, you can use this tool to automatically remove the crossing lines at road junctions.

By simply selecting a rectangle enclosing the junction area the program will remove the lines within that junction area.

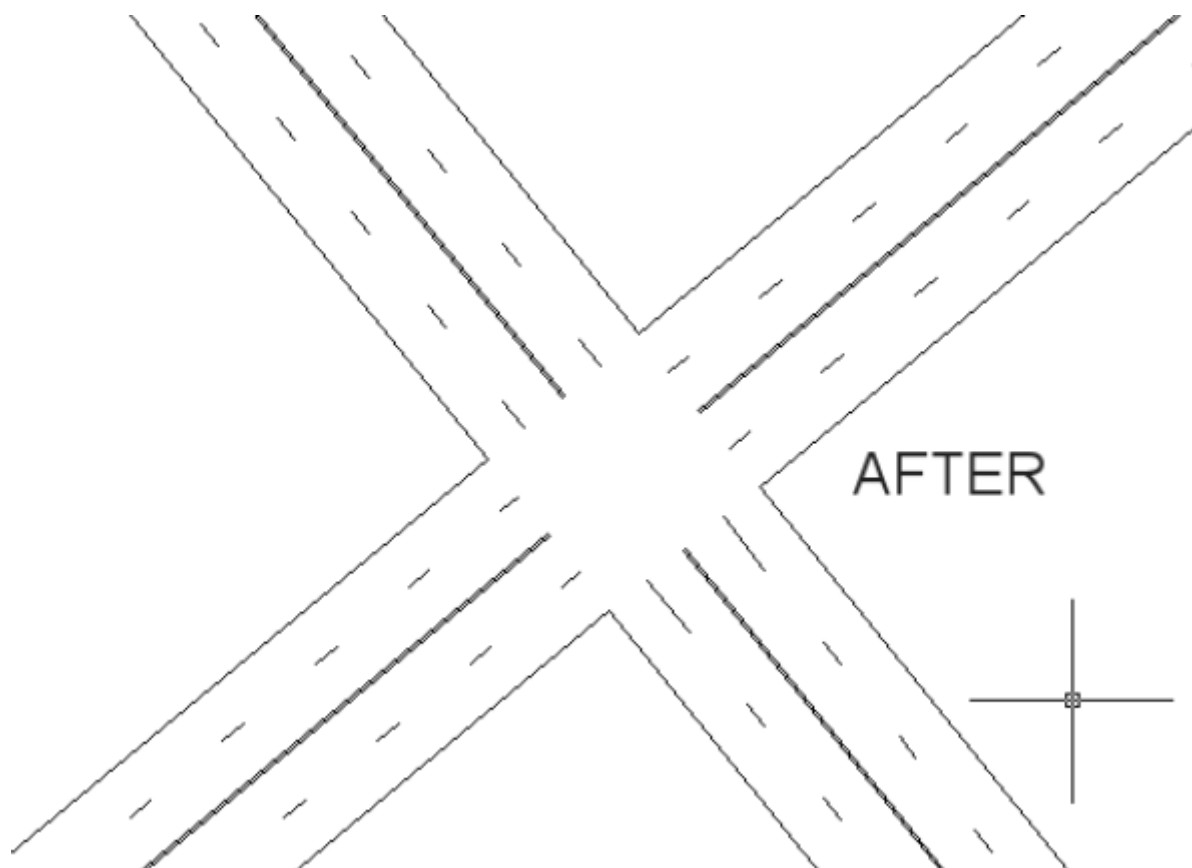
Follow the three screen-grab images below to see the program function and it's affect.

Here you can see two carriageways crossing on a drawing.

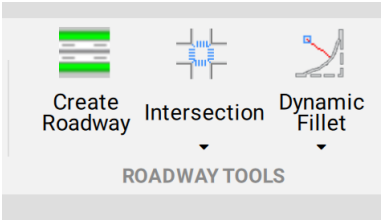
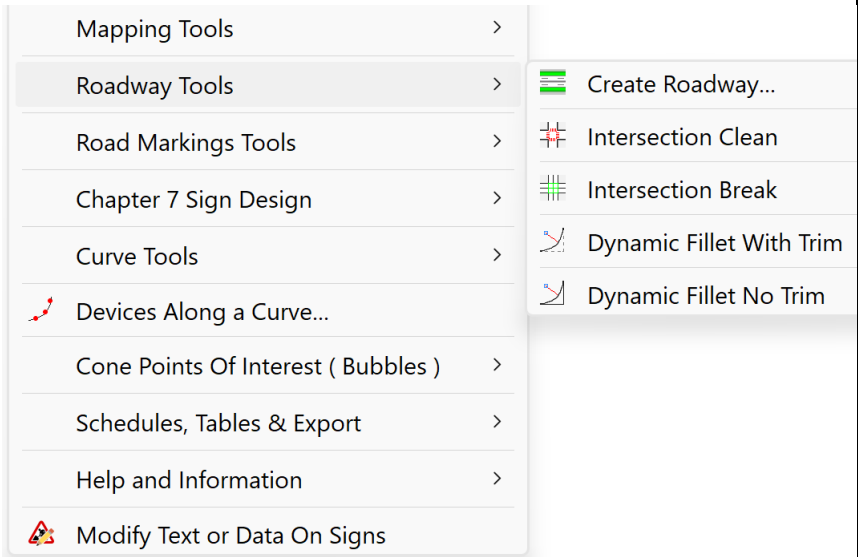
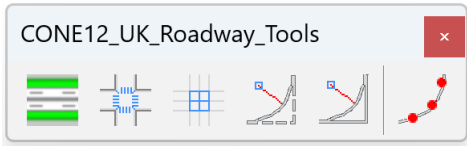




The user has clicked at the START position, and moved the mouse to END to select a rectangular area enclosing the road junction.



Roadway Tools – Intersection Break

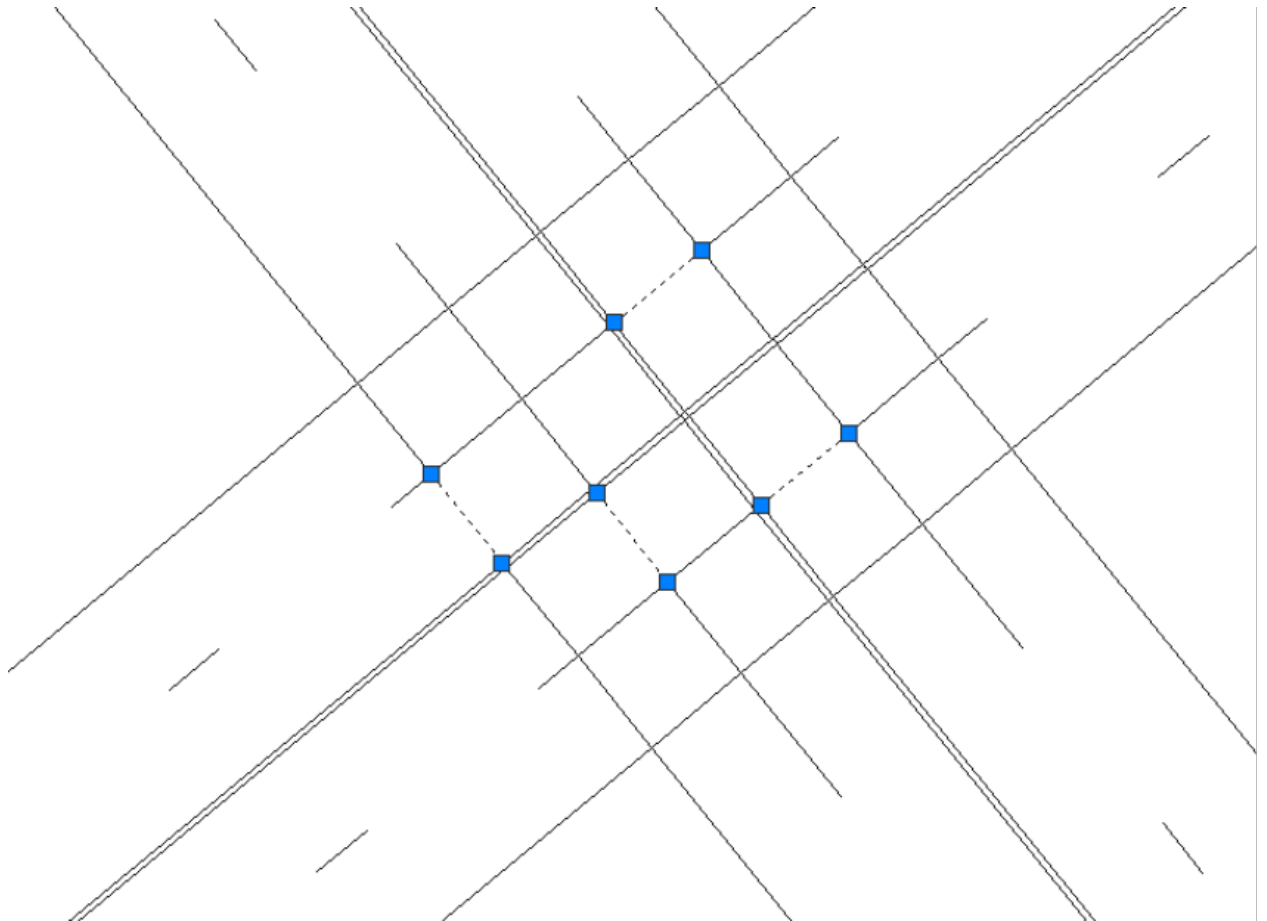
Command: CUKDF RIBBON: CONE12 Roads ROADWAY TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR CONE12_UK_Roadway_Tools	

RIBBON: CONE11 Part 3: Roadway Tools

Once a number of Carriageway lines are drawn on the drawing, you can use this tool to automatically segment the crossing lines at road junctions.

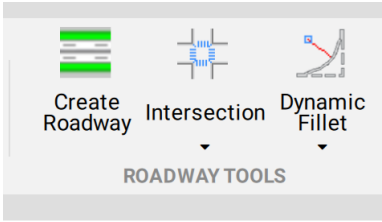
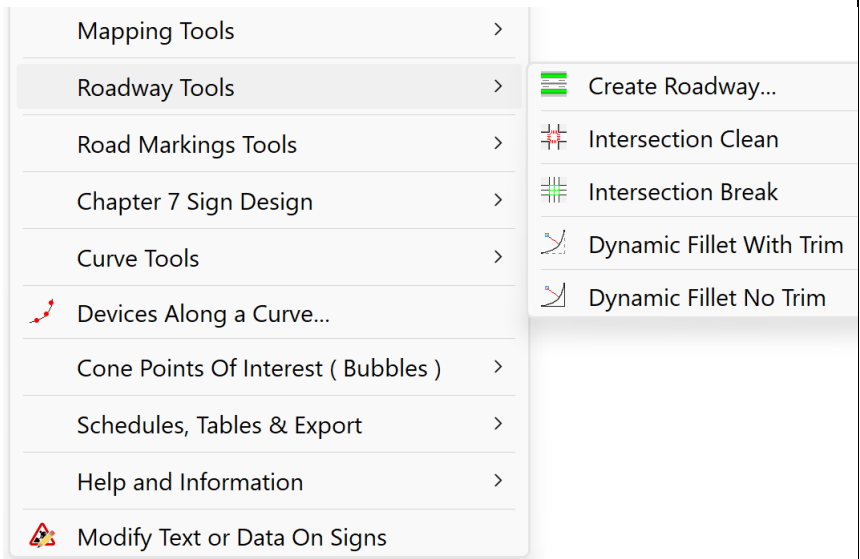
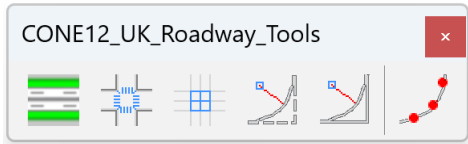
The function is very similar to the previous **Intersection Clean** , however, rather than erase all lines within the junction area, this BREAK function creates individual polyline elements where carriageway line segments cross.

Please refer to the screen grab below, where after the function has run, four individual polyline segments have been selected.



This function allows you to have much more control over which line elements are erased, and also using endpoints of remaining segments to draw any further junction details you wish.

Roadway Tools – Dynamic Fillet with Trim

Command: CUKDF RIBBON: CONE12 Roads ROADWAY TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR CONE12_UK_Roadway_Tools	

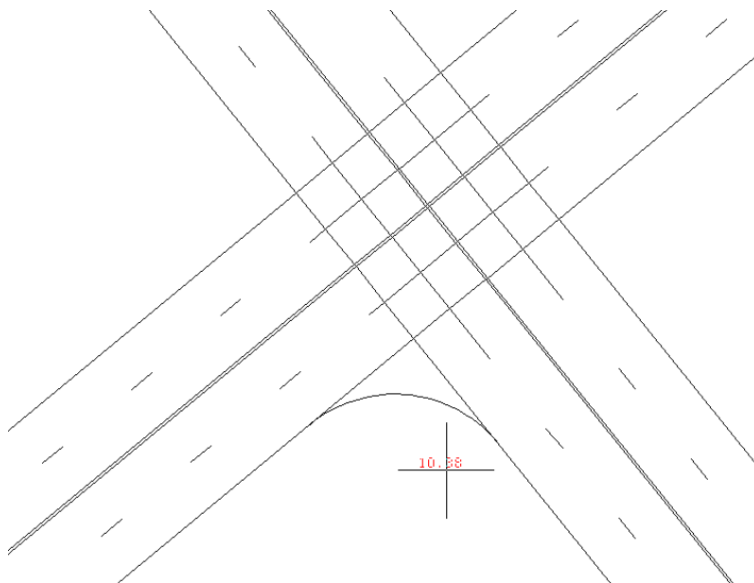
The standard CAD Modify - fillet command will ask for a fixed fillet radius, then place that radius between two selected lines. This CONE function allows you to select the two lines first, then dynamically select the radius by dragging the mouse cursor, or typing a value on the keyboard.

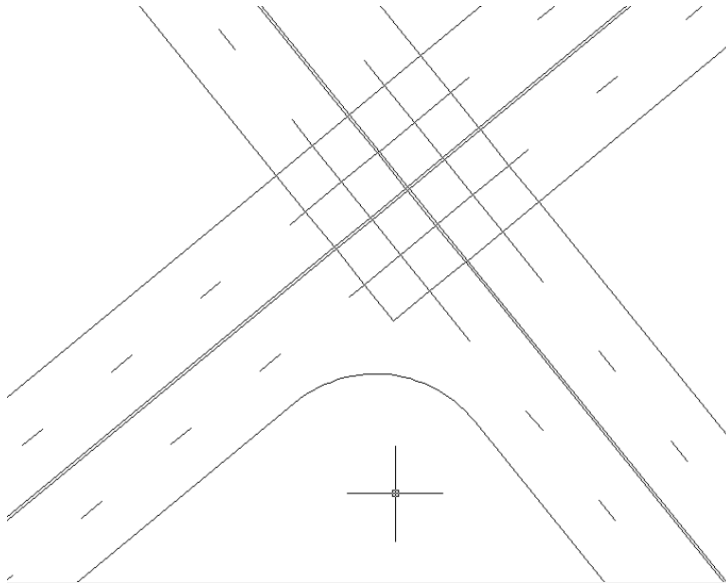
The lines are trimmed or cut-back to the start point of the radius, and you cannot specify a radius

User has selected two kerb lines at bottom centre of crossroads, and as cursor is moved, dynamic curve is drawn, and radius displayed next to cursor.

Option Keywords

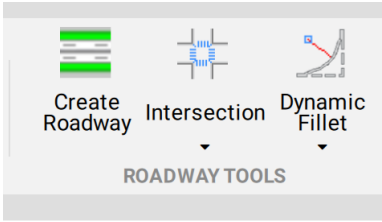
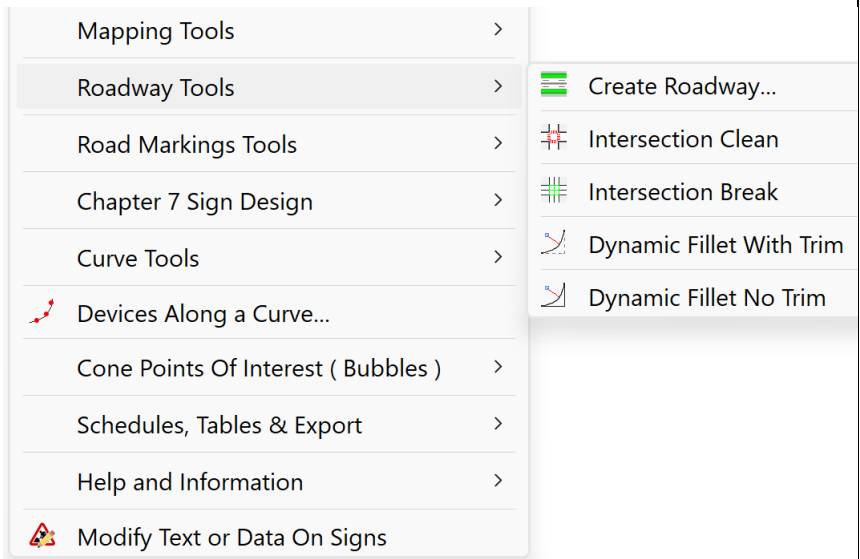
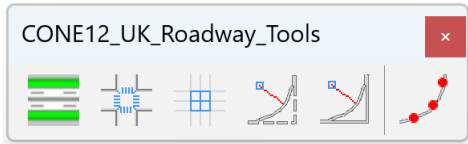
Radius: type value and press enter key.





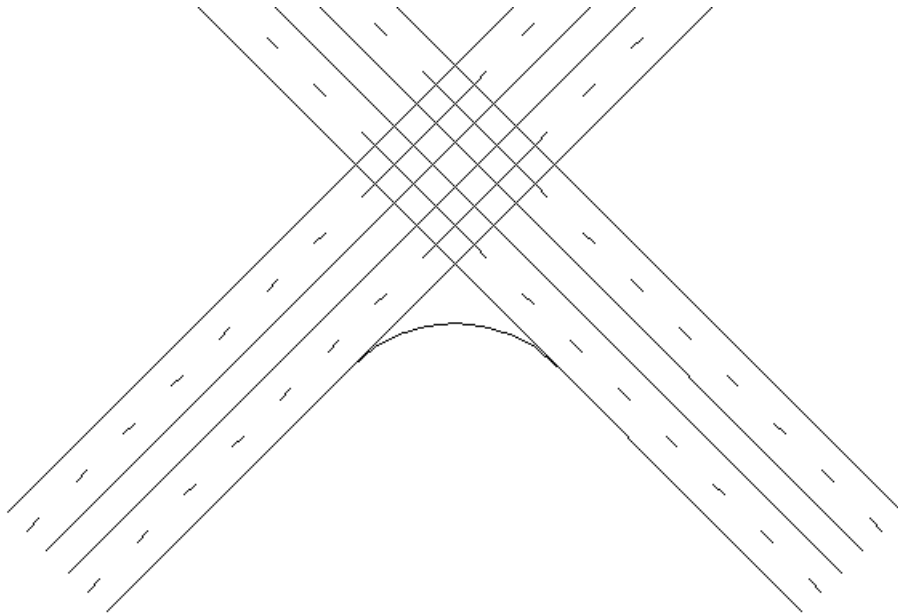
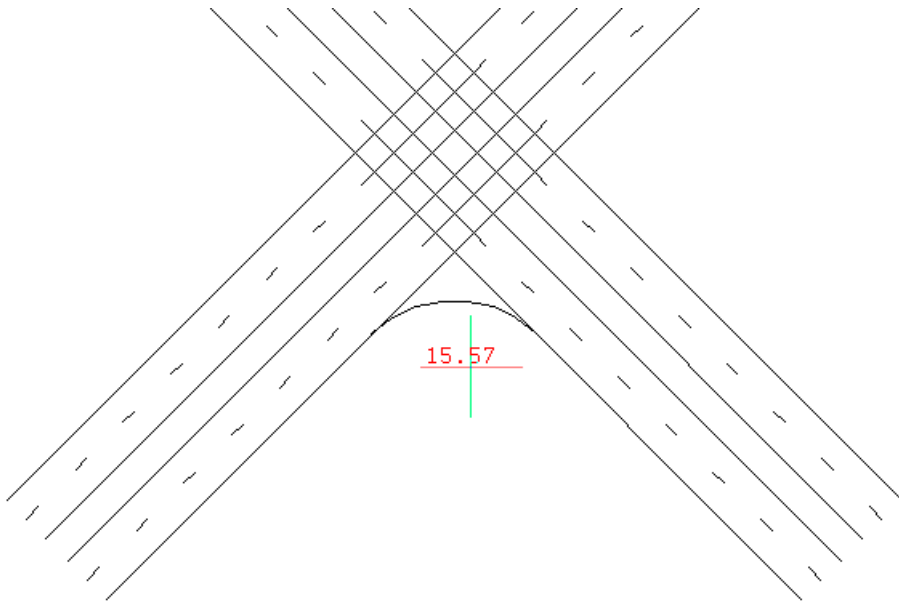
Showing junction AFTER trim, kerb lines are cut back to the start of the circular fillet element.

Roadway Tools – Dynamic Fillet No Trim

Command: CUKDF RIBBON: CONE12 Roads ROADWAY TOOLS	
CONE12UKBC Pull Down Menu	
TOOLBAR CONE12_UK_Roadway_Tools	

This function works exactly as previous **Dynamic Fillet with Trim**, only here, no trimming of the original lines is performed.

The original roadway lines will remain as they are, and the arc fillet sections will be added to the drawing fitting tangentially to the line segments indicated.



Showing junction AFTER inserting fillet but WITHOUT trim, all kerb lines remain as drawn.