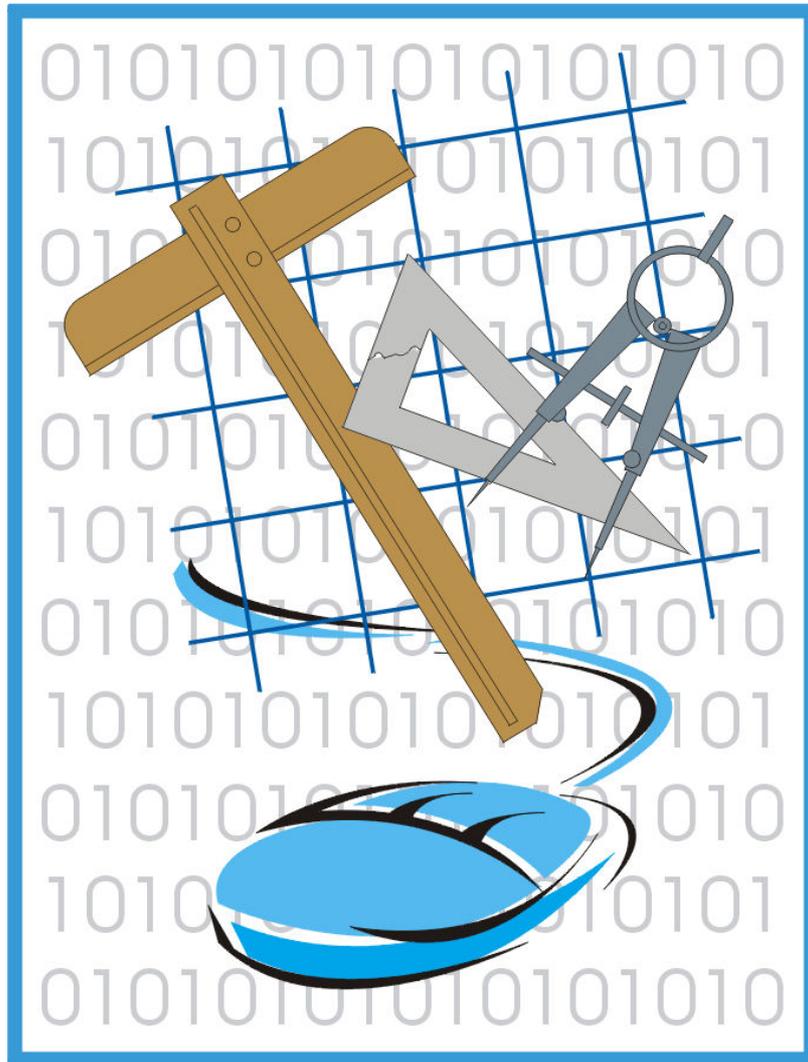# JAFTools – V8

User Guide

Version 8.24   October 2012

" My philosophy is to provide tools to people so that their work becomes more streamlined and efficient, thus enabling them to reach higher levels of standardisation and control. In this process, they are empowered to be completely independent and familiar with their working environment, ultimately resulting in the saving of man-hours. This is achieved by enhancing their knowledge with specific, targeted training, and the efficient use of customised tools, which they themselves have been involved in developing. '' - *JAF*

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III.1   DRING (Cont.)

III.2   NATIONAL STANDARDS

Any reference to 'uCheetah' also refers to 'JafTools'. uCheetah is the newer version available for MicroStation Ver 8i.

PART I INTRODUCTION

JafTools is a set of utilities, mainly customised for the Eskom Survey Drawing Office environment.

All routines are written using MDL (MicroStation Development Language), MicroStation User-Commands and some minor routines with Microsoft Visual C++.

Private Files.

JafTools uses two cell libraries exclusively:- c:\JafTools-V8\JafTools.cel and urbanrural.cel. It is recommended that the user does not add new cells to these libraries, as they will be lost whenever JafTools is updated or re-installed. If cells are not placed correctly via the routines, then the default cell libraries can be restored via the "Info" menu option.

The main aim of developing JafTools, is to reduce the number of man-hours spent on drawing tasks. Users are encouraged to put forward any proposals that support this aim. Most repetitive tasks can be automated, which saves man-hours and reduces boredom.

Changes to System Configuration.

JafTools files must reside on the C:\> drive: in the 'JafTools-V8' folder:
Viz: C:\JafTools-V8\

JafTools does not modify the computer system in any way, and neither does it make any changes to the MicroStation User Preferences.

JafTools does not put hidden 'marks' in design files, nor attach hidden identification to any design file elements.

Licensing.

User licence data is hard-coded into the software, and will expire after a specified period, if no maintenance agreement is in place.

Example Data/Files.

Some sections of this manual refer to example data, supplied for testing, or better understanding of the usage of any particular routine. All example data will be located in the directory 'C:\JafTools-V8\Examples\'

Obtaining a Licence to use JafTools.

In order to be able to use JafTools, a licensed version of the software will be created for you. In order to obtain the licence, first complete the Data Request Form available as "JafToolsData.exe". This can be forwarded to you via email, or is in the c:\JafTools-V8\RequestForm\ folder. It is also available via download from www.johnfrancis.co.za/DataConversion.html.

Fill in the data fields in the form, save the data to an ASCII file and email the resultant ASCII file to johnfrancis@iafrica.com, for processing.

PART I.a   <u>INSTALLATION</u>

To install JafTools, launch the 'JafTools-V8.exe' file supplied. Select Unzip to install the utilities into the default folder as suggested. Do not install into any other folder, as the utilities will not function correctly. If the c:\JafTools-V8\ folder does not exist, then it will be created automatically.
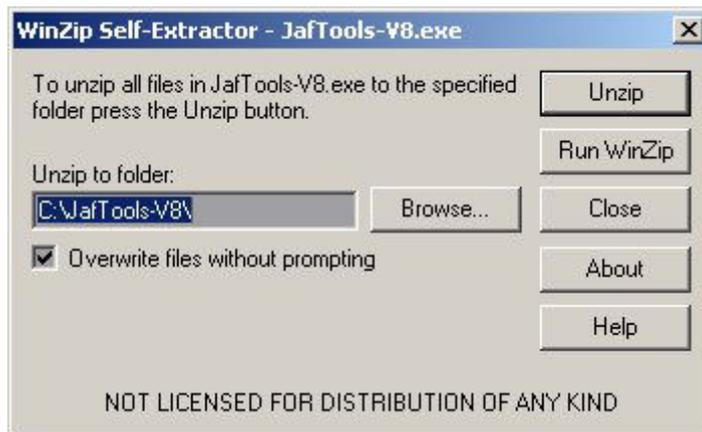
PART II   USING JafTools

Launching the application.

NOTE! JafTools will not work in "High Security" versions of MicroStation.

In the key-in window, type:- **MDL LOAD JAFTOOLS**
            or
Use the MicroStation Menus:-   Utilities->MDL Applications: Select
JAFTOOLS under 'Available Applications', then click 'Load'. Close the MDL
Applications Dialog Box Window. **(This option MUST be used the first time the
application is used – you will need to "Browse" to c:\JafTools-V8\MdlApps\ to
find the JafTools.ma file.)**

A Function Key can be assigned for the loading of JafTools;

Once the Main JafTools Dialog Box is displayed, the utilities are available via a series
of pull-down menus.

Fig. 1: Main JafTools Dialog Box

Selecting 'Quit' will unload JafTools, and all options loaded from 'NationalStds' and
'Drawing'. Routines loaded from 'Survey' will remain loaded if 'Quit' is selected.

NOTE!

If a dialog box appears suggesting that "a configuration file is missing", it can be
either of two things:-

1).   A needed configuration file "c:\JafTools-V8\config\JafTools-V8.cfg" is
        missing – you will need to contact John Francis to obtain a copy.

2).   A 'Rights' issue needs to be resolved (only in Windows 7). All users need to
        be given 'FULL Rights' to the folder and sub-folders in which the
        MicroStation executables etc reside. The default folder is:- C:\Program Files
        (x86)\Bentley\MicroStation V8 (SELECTseries)\MicroStation\ - but it may
        have been installed elsewhere, at the installer's request. The folder can be
        identified by looking at the 'MSLOCAL' variable in
        "Workspaces/Configuration" in MicroStation's main menus. These folders
        need to be 'writable', however when installed in Win 7, they are 'read-only'
        by default.

PART III   <u>CUSTOMISED UTILITIES</u>

These utilities are grouped into three main categories, NationalStds, Drawing, Survey and 3rdPtyUtils (Third Party Utilities). The NationalStds and 'Drawing' sections are particularly relevant to Eskom, as they are in accordance with the Eskom Standards. The 'Survey' section is more generalised. The '3rdPtyUtils' are routines written by other parties (Freeware).

<u>III.1   DRAWING</u>

These tools provide a means of generating mapping symbology for map features. They are particularly useful for compiling spanning plans/detail sheets and profile strip survey drawings. The 'JAFTools' dialog box must not be closed while any items under 'Drawing' are open. There are four groups of routines, as follows:

Map Cells   Individual map symbols, representing features that exist on the ground, and other map information symbols.

Map Areas   Filling of an area, defined by the user, with an array of symbols representing the feature that exist on the ground.

Map Linear   These routines place symbols along user-defined linear elements, synonymous with MicroStation LINE elements.

Map Curves   These routines place symbols along user-defined curve elements, synonymous with MicroStation CURVE elements.

III.1.a   Map Cells

In the JAFTools Dialog Box,
select 'Drawing->Map Cells'.

The Map Cells Dialog Box will
be displayed, as such:
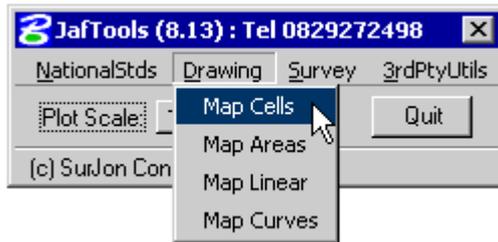
Fig. 2: Map Cells Selection
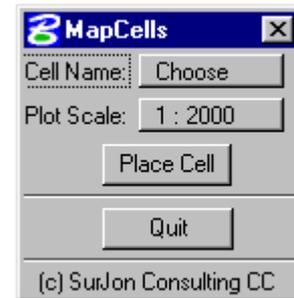
Fig. 3: MapCells Dialog Box

Click on 'Choose', in the MapCells dialog box to select which cell is to be
placed. The available options are:

DipTank
  Dipping Tank
Grave
Hut
Tower
  Major Line Tower Position
Manhole
Pole
  General Power Pole
Reservoir
North
  North Arrow
TelPole
  Telephone Pole
Tree
Trig
  Trig Beacon
Well
Windmill
Water Main
Eskom Logo

Select the scale that the drawing will be plotted at.

Select 'Place Cell'.

Place the cell in the drawing, using a Data point.

III.1.b   Map Areas

In the JAFTools Dialog Box,
select 'Drawing->Map Areas'.

The Map Areas Dialog Box
will be displayed, as such:
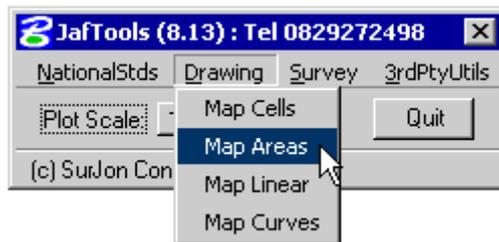
Fig. 4: Map Areas Selection

Fig. 5: Map Areas Dialog Box

Click on 'Feature', in the Map Areas dialog box to select which Area Symbol
is to be used. The available options are:

Lands
   Cultivated Lands
IrLands
   Irrigated Lands
Trees
ConifTr
   Coniferous Trees
Marsh
Rocky
   Rocky Outcrop
Orchard
   Cultivated Orchard
IrrOrch
   Irrigated Orchard
Plantn
   Plantation
Bush

Select the scale that the drawing will be plotted.

Select 'Draw', then define the area, using Data points as if you were drawing a
fence.

Once the 'fence' is closed, the area will be filled with the Feature pattern as
selected.

Hint – If you wish the symbols in the patterned area to be 'snappable', then
prior to using this routine, open the 'Patterns' tool menu, and select
'Snappable Pattern' in the pattern settings dialog box. Also, always have
'flood' selected in the patterns dialog box prior to defining area to be
patterned.

III.1.c   Map Linear

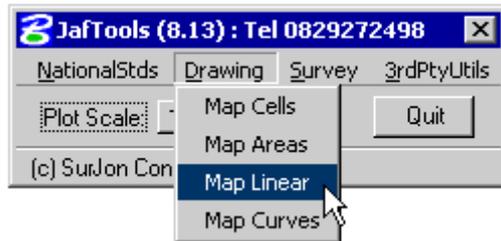In the JAFTools Dialog Box,
select 'Drawing->Map Linear'.

The Map Linear Dialog Box
will be displayed, as such:

Fig. 6: Map Linear Selection

Fig. 7: Map Linear Dialog Box

Click on 'Feature', in the Map Linear dialog box to select which Linear
Symbol is to be used. The available options are:

Tel Line	Farm Bdy
Telephone Line	*Farm Boundary*
Tel Cable	SubDiv Bdy
Telephone Cable	*Sub-Divisional Boundary*
Pipeline	Wall
UG Cable	Powline
Underground Cable	*General Power-line*
Camp Fence	D/C Pline
Sec Fence	*Double Circuit Power-Line*
Security Fence	

Select the scale that the drawing will be plotted .

Select 'Draw'.

Place a series of Data points as if you were drawing a linestring.

Once the 'Reset' button is pressed, the line will be patterned with the Feature
as selected.

The last two Data Points determine the orientation of the symbols on the
placed linestring. If the last Data Point is to the right of the previous one, then
the symbol orientation will be to the top of the screen. If the last Data Point is
to the left of the previous one, then the symbol orientation will be to the
bottom of the screen.

Hint – If you wish the symbols in the patterned area to be 'snappable', then
prior to using this routine, open the 'Patterns' tool menu, and select
'Snappable Pattern' in the pattern settings dialog box.

III.1.d   Map Curves
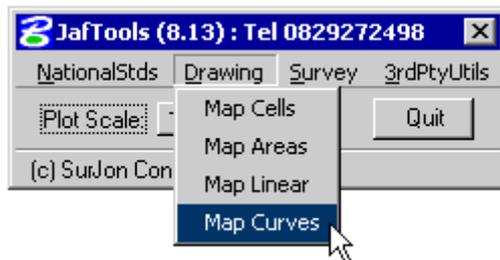
In the JAFTools Dialog Box,
select 'Drawing->Map Curves'.

The Map Curves Dialog Box
will be displayed, as such:

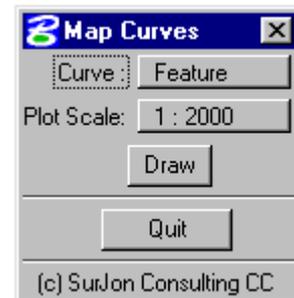Fig. 8: Map Curves Selection

Fig. 9: Map Curves Dialog Box

Click on 'Feature', to select which Curve Symbol is to be used. The available options are:

> Track
> Road
> Donga
> Embank
>> *Embankment*
> Edge Bush
>> *Edge of Bush*
> Line Trees
>> *Line of Trees*
> Line Conif
>> *Line of Coniferous Trees*
> Foot Path
> Rail Line
>> *Railway Line*
> Terrace

Select the scale that the drawing will be plotted.
Select 'Draw'.
Place a series of Data points as if you were drawing a curvestring.
Once the 'Reset' button is pressed, the curve will be patterned with the Feature as selected.

The last two Data Points determine the orientation of the symbols on the placed curvestring. If the last Data Point is to the right of the previous one, then the symbol orientation will be to the top of the screen. If the last Data Point is to the left of the previous one, then the symbol orientation will be to the bottom of the screen.

Hint – If you wish the symbols in the patterned area to be 'snappable', then prior to using this routine, open the 'Patterns' tool menu, and select 'Snappable Pattern' in the pattern settings dialog box.

III.2 NationalStds (National Standards)

These tools are used for drawing all MV and LV infrastructure, typically used in electrification drawings. Most of the items in the menus operate in a similar manner, with few exceptions, however, the operations are simple and self-explanatory.
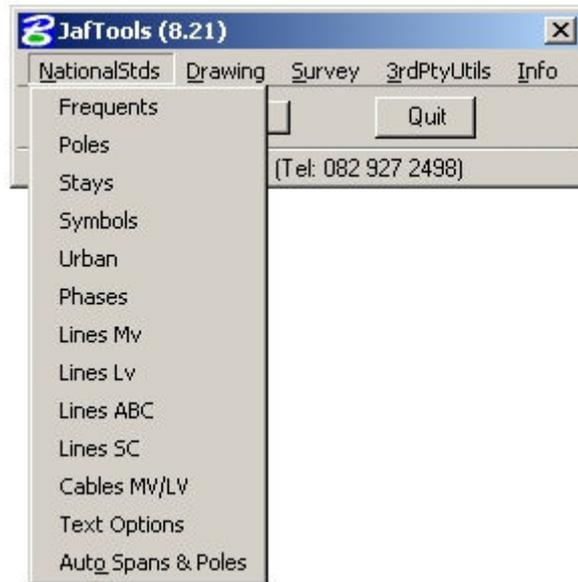
It should be noted that it is good practice (when drawing lines/conductors), to use the JafTools menus merely to 'set up' the line symbology, and then to use the standard MicroStation 'Place SmartLine' utility, and AccuDRAW to complete the line drawing.
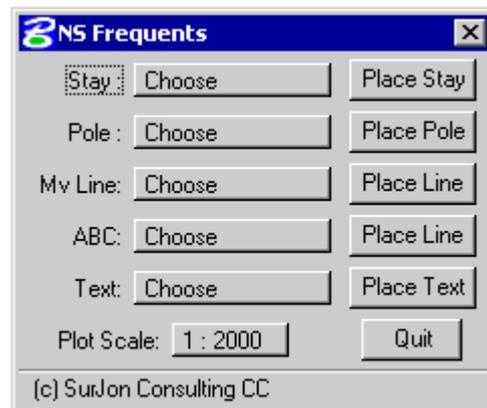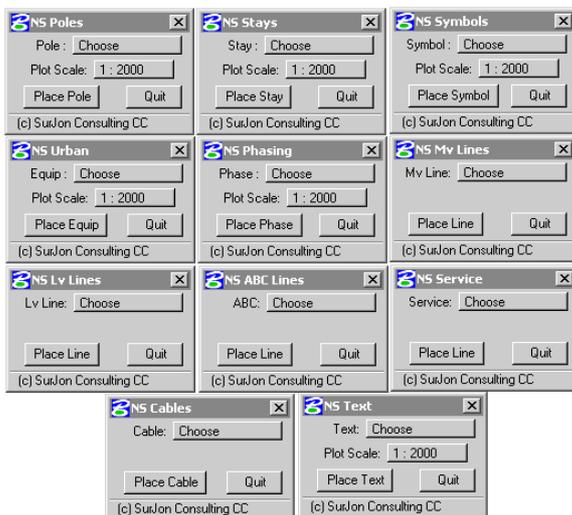
Each category under NationalStds has its own dialog box, but a 'Frequents' menu is also supplied, which incorporates the most commonly used items in these menus.

III.2.a   Auto Span Lengths and Pole Placement

The Span Lengths Utility enables the automated placement of Span Lengths.

The choice available (MV or LV Lines), **ONLY sets the TEXT settings** specifically, i.e. Level 16 for LV and Level 17 for MV. This routine does not determine whether a line is either MV or LV, based on the line's symbology. MV Poles will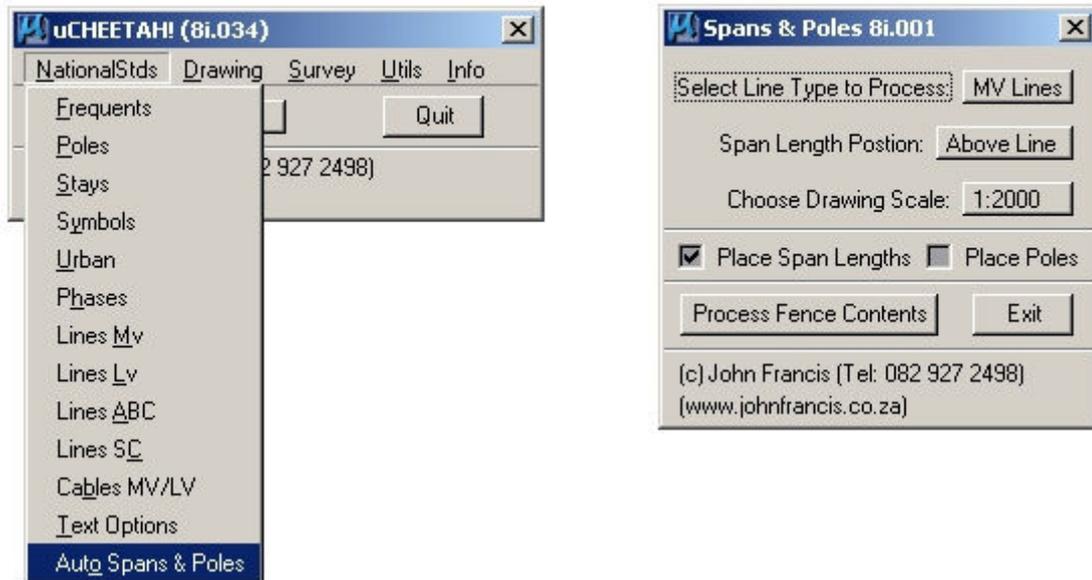 be placed if "MV Lines" is selected, LV Poles if "LV Lines" is selected. Click in the Check-Box for placement of poles. All lines in the fence will be processed, so switch off the levels containing any lines which should not be processed, e.g. LV17 (eL Text Box).

The span lengths can be placed either Above or Below the line.

NOTE! The Scale setting is not linked to the general "JafTools" Scale setting, as this is a separate routine – so be careful.

Usage: Place a Fence (any shape) around the lines for which span lengths need to be calculated. Obviously, MV and LV must be processed separately, so turn on/off the relevant levels as you require. For example, make the level which has the MV lines the Active Level, and switch off all the other levels (except LV17, which is for MV Notes/Text). Place a fence around the lines to be processed, and select "Process Span Lengths". Do the same for LV. Fence 'Clip' mode does not work with this routine.

Some fiddling, ingenuity and common sense will be required when processing MV/LV lines on shared structures – where they are drawn parallel, in order for the span lengths to be displayed in the correct position and with the correct value.

Poles are placed at the end of each line segment, so some cleaning up may be required. Obviously, MV/LV combination poles will need to be placed manually, and clearing away of the auto-placed poles on the MV-over-LV sections will need to be carried out first.

III.3   SURVEY

These tools are MDL routines which enhance the functionality of MicroStation. They assist the user by automating tasks which would otherwise take a long time to complete. Once any of the options on the 'Survey' menu are selected, the main 'JAFTools' menu may be closed if desired. Included here are the following:

ReadYXZ
  Import YXZ Co-ordinates From ASCII or Text File
Lo-Grid
  Create YX Grid Lines
CadCodes
  Create and Place Rural Structure Codes
Ext-WGS84
  Extracts Geographical C0-ords to ASCII File (Lat, Long)
Eliminate
  Eliminates duplicate TEXT items within a specified radius
ColmPlot
  Imports Geographical Co-ordinates to DGN
Imp-YXZ
  Import YXZ Co-ordinates From ASCII or Text File
  (As per original SE/95 Version)
Exp-NYXZ
  Exports Text Items' Co-ordinates to ASCII file
Exp-Extras
  Exports Text Items' Co-ordinates to ASCII file in various formats

III.3.a   ReadYXZ

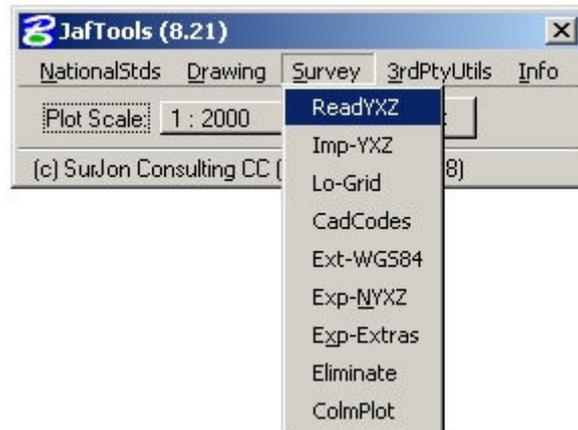In the JAFTools Dialog Box, select 'Survey->ReadYXZ'.

Fig. 24: ReadYXZ Selection

After requesting the path and name of the ASCII co-ordinate file, a new Dialog Box will appear as follows:
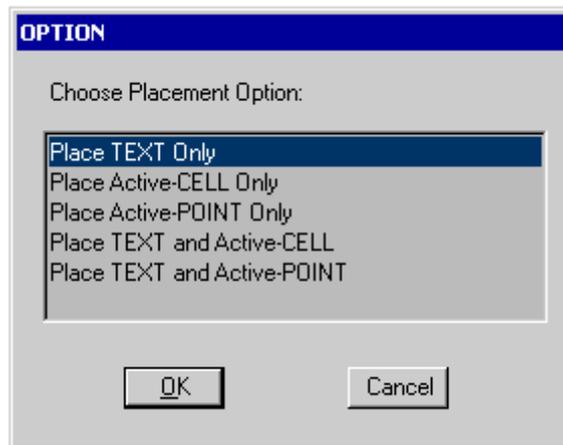

Fig. 25: ReadYXZ Dialog Box

ReadYXZ will import points from an ASCII file, into the design file.

The user has the option of placing a Cell at the co-ordinates listed in the ASCII file, or the T*ext (usually the point's name)* associated with the co-ordinates. Alternatively, both a Cell, *and* the Text may be placed. Instead of a cell, an active point may be imported. 'ASCII' is the anagram for 'American Standard Code for Information Interchange'. It is basically a plain text file (not binary), that can be viewed and edited in any plain text editor, such as notepad. If any 'hieroglyphics' are visible when viewing an ASCII file, then the file is not ASCII.

Requirements:
1)   ASCII file in proper format. (N Y X Z or N Y X)
2)   The cell library in which the desired CELL resides, must be attached.

Text

This program uses the current text settings, i.e. size, justification and font.

If the text is to be plotted at any specific size for a desired scale output, then the text size must be calculated and set prior to clicking 'OK'.

N Y X Z (At least ONE SPACE between fields, no spaces in the Name (N))
or
PtName Y X

E.g.:
ROCK -78234.42 3218336.65 254.32
MH -78106.22 3218332.23 252.34
or
ROCK -78234.42 3218336.65
MH -78106.22 3218332.23

ASCII File rules:

There must be at least one space between the fields (columns).
There can be many spaces, but there must be at least one.
The data does not have to be in straight columns, just as long as there is at least one space between the fields.

The spaces must not be TABS.
There must not be any spaces in the PtName (N) field. If your ASCII file has names with spaces in, they must be replaced with underscores(_) or hyphens (-).
The decimal character must be a point, not a comma.
The Fields/Columns must not be separated by commas, only spaces.

Input Data Format

Select 'Yes' if the signs of the Y,X co-ordinates in the ASCII file must be changed before plotting. I.e. The Eskom standard specifies that X co-ords must display as negative in MicroStation. If the X Co-ord value in the ASCII file is positive, then this box should be checked.

Ascii Format

Name Y X Z is used if PtName is the 1st Field/Column in the ASCII file.
   See example file 'NYXZ-EG.TXT'
Y X Z Name is used if PtName is the 4th Field/Column in the ASCII file.
   See example file 'YXZN-EG.TXT'

Once all selections have been made, select 'OK', and the program will run, and indicate in the MicroStation Command Window, how many points were plotted.

Example

Attach Cell Library 'JAFTOOLS'
Set Active Cell to 'TRIG'
Set Text Size to 130 (TX=130)
Set Active Scale to 50 (AS=50)
Load 'READYXZ' mdl application.
Select 'Place TEXT and Active-CELL'
Select 'Yes' to reverse the signs
Use example ASCII File 'NYXZ-EG.TXT'
Select 'Run' to import the ASCII File.

III.3.b Lo-Grid

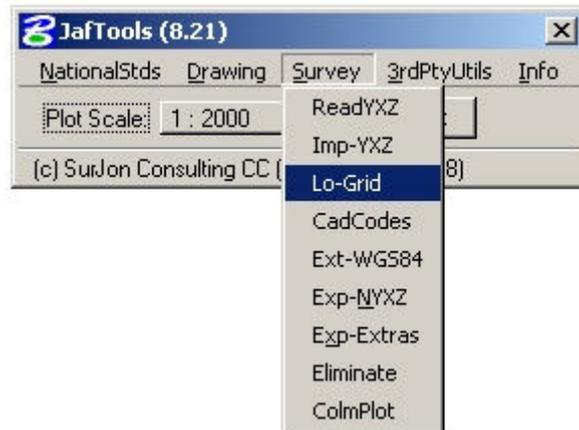In the JAFTools Dialog Box, select 'Survey->Lo-Grid'.

Fig. 27: Lo-Grid Selection

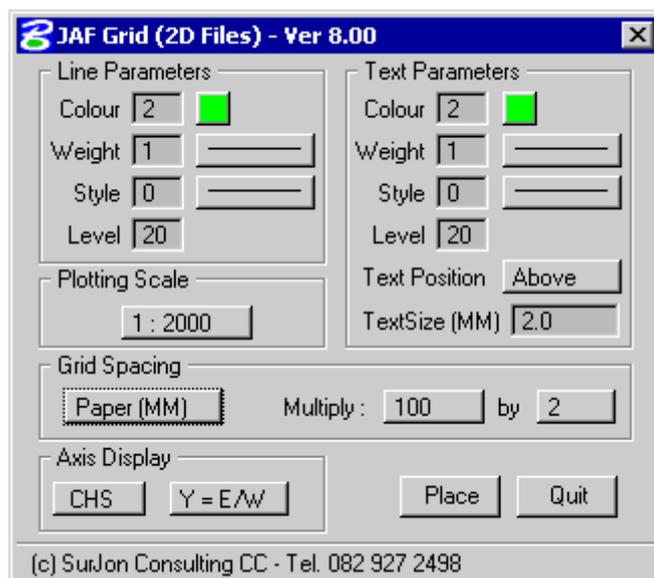A new Dialog Box will appear as follows:

Fig. 28: Lo-Grid Dialog Box

Note: This utility only works in 2D Files.

The default settings are typical for 1:2000 plans.

Place a fence around the area where the grid is required. The fence can be irregular or a standard rectangular fence.

Line Parameters

Select desired element attributes for the grid lines.

Text Parameters

Select desired element attributes for the Y&X Grid Values

TextSize will be the size of the text when plotted on paper at the selected scale.

Plotting Scale

Choose the desired scale that the final paper plot will be done.
Note: This scale option is not related to the JAFTools Scale setting.

Grid Spacing

The grid spacing can be specified in two ways, either in units on the ground, or units(mm) on the plotted paper, which is the most common.

The ground units choice is handy if somebody wishes to count all the houses in, for example, 1Km block areas.

The 'Multiply' option is used to specify how many grid-spacing units. The default is 200, which is 200mm on the final paper plot.

Any combination of 'Multiply' figures can be used to get the required units. For example, the instead of '100 by 2', '50 by 4' could be used to get the same result.

Axis Display

Choose either 'CHS' or 'AS-IS'.

CHS will cause the Grid Values to be opposite that of the actual design file values. i.e. '–X' co-ords will be positive '+X' on the Grid.

AS-IS will cause the Grid Values to be the same as the actual design file values.

Y=E/W or Y=N/S

Always use Y=E/W, as this is the standard for South Africa.

Y=N/S is provided as an option, should there ever be reason to display grids on some user-defined local system.

III.3.c   CadCodes
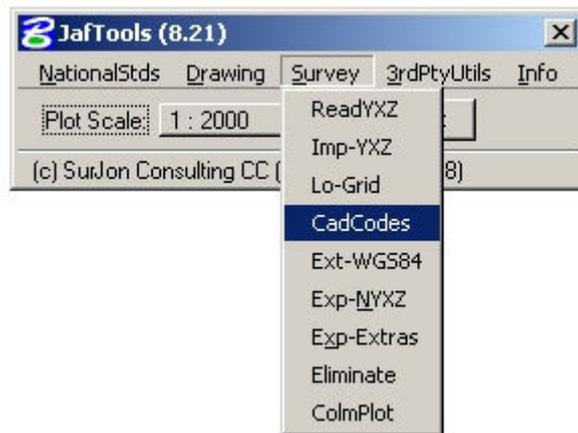
In the JAFTools Dialog Box, select 'Survey->CadCodes'.

Fig. 31: CadCodes Selection
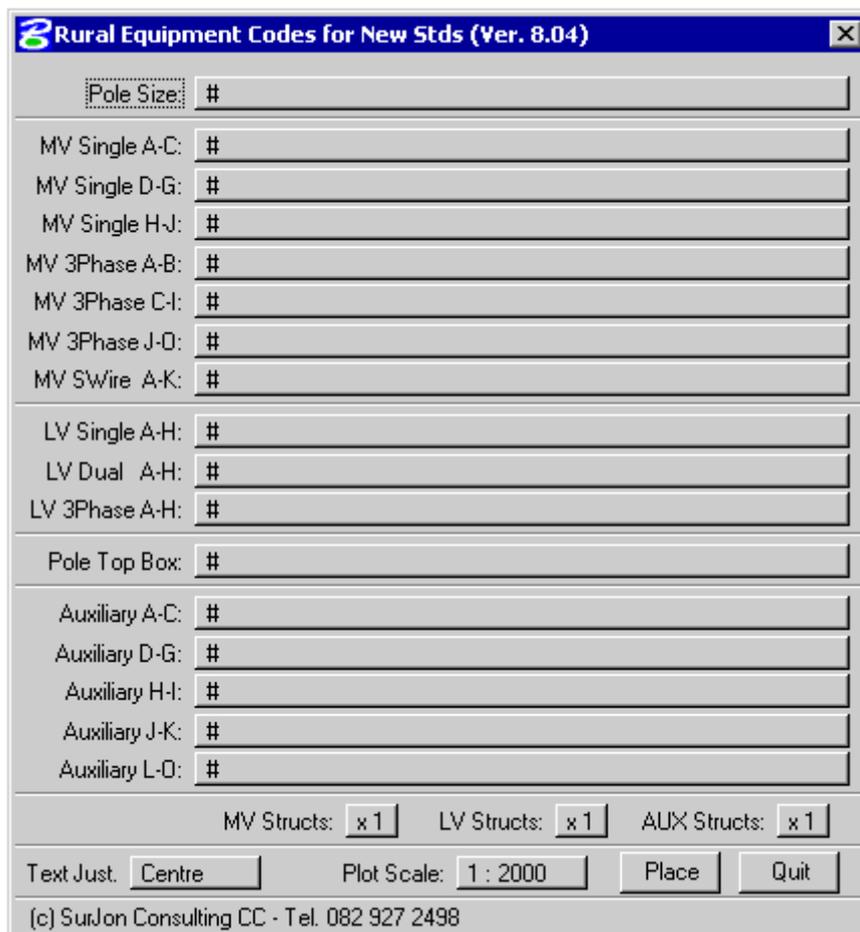
A new Dialog Box will appear as follows:

Fig. 32: CadCodes Dialog Box

This utility assists the user to 'build' the 5-digit code used to describe a Rural Line Structure.

The code consists of five characters: 1   Pole Size
                                                2   MV Equipment
                                                3   LV Equipment
                                                4   Pole Top Box
                                                5   Auxiliary Equipment

The dialog box above is divided into five sections, corresponding to the five characters.

Choose one option in each section, to build the code.

Choose a multiplier for the structures if desired.
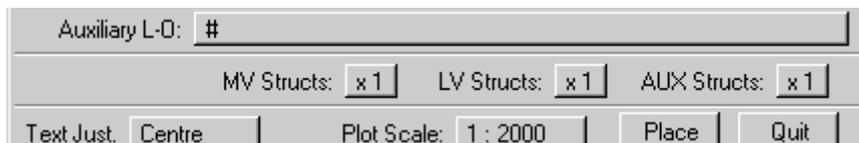
Select the Text Justification desired.

Fig. 32a: CadCodes Multiplier Option

Select the scale that the drawing will be plotted at.
Note: This scale option is not related to the JAFTools Scale setting.

Select 'Place'.

Position the CODE where desired in the drawing, using a Data Point.

III.3.d   Ext Wgs84

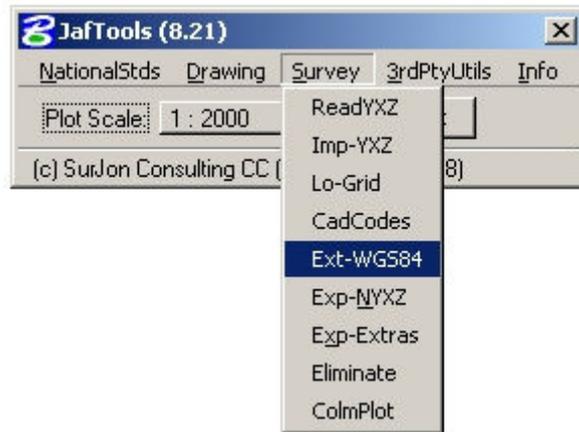In the JAFTools Dialog Box, select 'Survey->Ext-WGS84'.

Fig. 33: ExtWGS84 Selection

A new Dialog Box will appear as follows:

Fig. 34: ExtWGS84 Dialog Box

This utility will extract TEXT items within a fence, to an ASCII file, Geographical (Latitude/Longitude) co-ordinates.

There must be no spaces in the TEXT strings.

First, place a FENCE around the TEXT items to be exported.

Choose 'OutFile' to indicate the desired target ASCII file to be created.

Click a 'Data Point' in the view when the TEXT items are displayed, then select 'Export'.

The ASCII file will then be created as indicated.

III.3.e Eliminate

In the JAFTools Dialog Box, select 'Survey->Eliminate'.
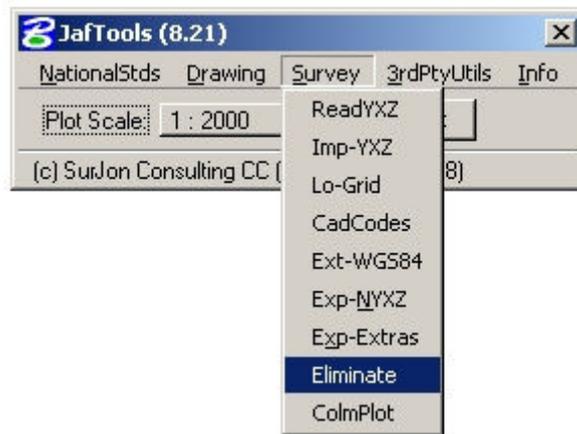

Fig. 35: Eliminate Selection
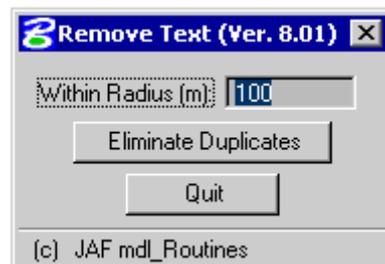
A new Dialog Box will appear as follows:

Fig. 36: Eliminate Dialog Box

This utility will eliminate duplicate TEXT items within a fence.

It is useful to 'Thin-out' GPS data.

First, place a FENCE around the TEXT items to be eliminated.

Set the Radius in Metres, within which the elimination must take place.

Select 'Eliminate' to carry out the elimination.

III.3.f   ColmPlot (Column Plot)

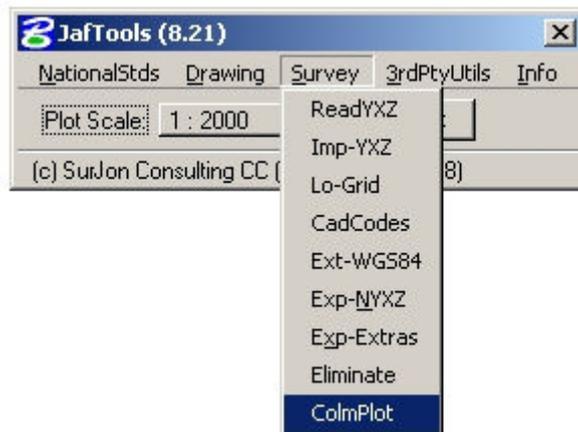In the JAFTools Dialog Box, select 'Survey->ColmPlot'.

Fig. 37: ColmPlot Selection

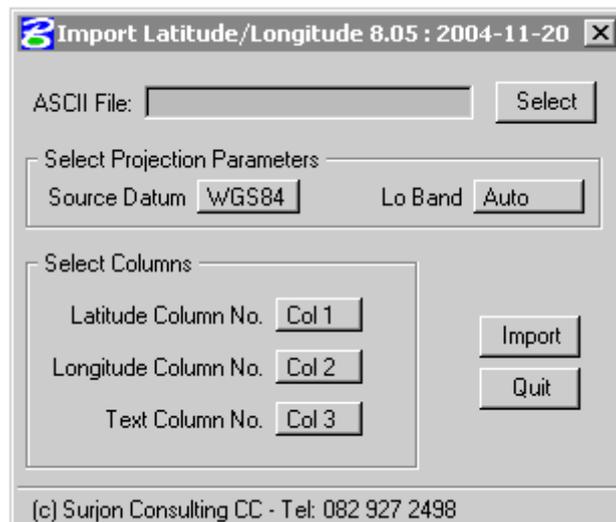A new Dialog Box will appear as follows:

Fig. 38: ColmPlot Dialog Box

This utility will import ASCII Geographical co-ordinates.

Set the desired Text Size, Level, Colour, etc.

Select the ASCII file (Format (DD MM SS.SSSS, DD MM SS.SSSS, N,N,)
(Any number of 'Columns', separated by a comma)

Select the Datum of the ASCII data. (The same Datum will be used to create the DGN file).
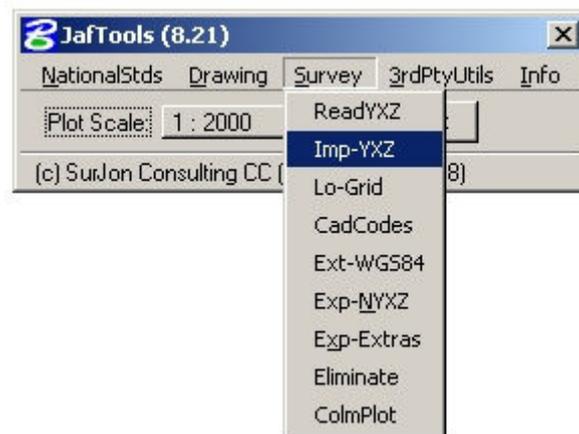
Select which columns the Latitude, Longitude and Text items are in.
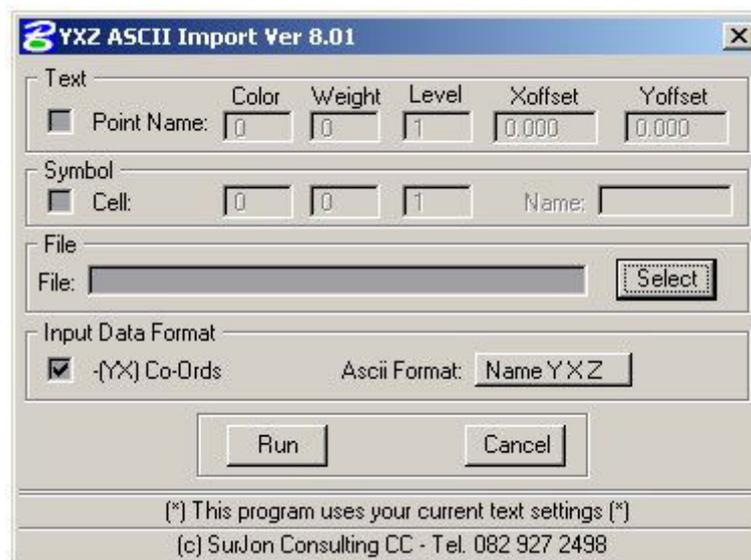
Select 'Import'.

III.3.g   Imp-YXZ

In the JafTools Dialog Box, select 'Survey->ReadYXZ'.

After requesting the path and name of the ASCII co-ordinate file, a new Dialog Box will appear as follows:

ReadYXZ will import points from an ASCII file, into the design file.

The user has the option of placing a Cell at the co-ordinates listed in the ASCII file, or the T*ext (usually the point's name)* associated with the co-ordinates. Alternatively, both a Cell, *and* the Text may be placed. 'ASCII' is the anagram for 'American Standard Code for Information Interchange'. It is basically a plain text file (not binary), that can be viewed and edited in any plain text editor, such as notepad. If any 'hieroglyphics' are visible when viewing an ASCII file, then the file is not ASCII.

Requirements:
1)   ASCII file in proper format. (N Y X Z or N Y X)
2)   The cell library in which the desired CELL resides, must be attached.

Text

This program uses the current text settings, i.e. size, justification and font.

If the text is to be plotted at any specific size for a desired scale output, then the text size must be calculated and set prior to clicking 'OK'.

N Y X Z (At least ONE SPACE between fields, no spaces in the Name (N))
or
PtName Y X

E.g.:
ROCK -78234.42   3218336.65   254.32
MH   -78106.22   3218332.23   252.34
or
ROCK -78234.42   3218336.65
MH   -78106.22   3218332.23

ASCII File rules:

There must be at least one space between the fields (columns).
There can be many spaces, but there must be at least one.
The data does not have to be in straight columns, just as long as there is at least one space between the fields.

The spaces must not be TABS.
There must not be any spaces in the PtName (N) field. If your ASCII file has names with spaces in, they must be replaced with underscores(_) or hyphens (-).
The decimal character must be a point, not a comma.
The Fields/Columns must not be separated by commas, only spaces.

Input Data Format

Select 'Yes' if the signs of the Y,X co-ordinates in the ASCII file must be changed before plotting. I.e. The Eskom standard specifies that X co-ords must display as negative in MicroStation. If the X Co-ord value in the ASCII file is positive, then this box should be checked.

ASCII Format

Name Y X Z is used if PtName is the 1st Field/Column in the ASCII file.
        See example file 'NYXZ-EG.TXT'
Y X Z Name is used if PtName is the 4th Field/Column in the ASCII file.
        See example file 'YXZN-EG.TXT'

Once all selections have been made, select 'OK', and the program will run, and indicate in the MicroStation Command Window, how many points were plotted.
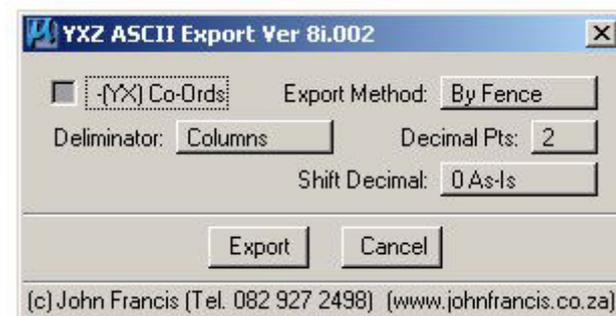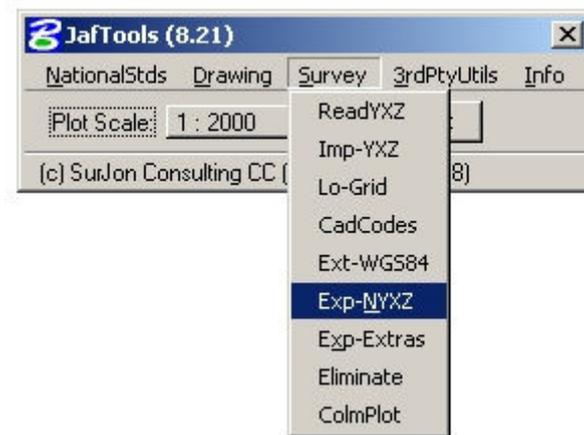
Example

Attach Cell Library 'JafTools'
Set Active Cell to 'TRIG'
Set Text Size to 130 (TX=130)
Set Active Scale to 50 (AS=50)
Load 'READYXZ' mdl application.
Click –(YX) Co-Ords to reverse the signs
Use example ASCII File 'NYXZ-EG.TXT'
Select 'Run' to import the ASCII File.

III.3.h   Export NYXZ to ASCII File

In the JafTools Dialog Box, select 'Survey->Exp-WGS84(DMS)'.

With this routine, it is possible to export text items to an ASCII file in various formats.

Fig. 23: Exp-NYXZ Field Delimiter Options

By 'Checking' the '-[YX] Co-Ords' box, the output co-ordinates will have their signs reversed. Output fields can be separated by a comma, single space or in column format.

Fig. 24: Exp-NYXZ Element Group Options

Text items to be exported can be specified by means of a fence, individual items or all the text items in the Dgn File.
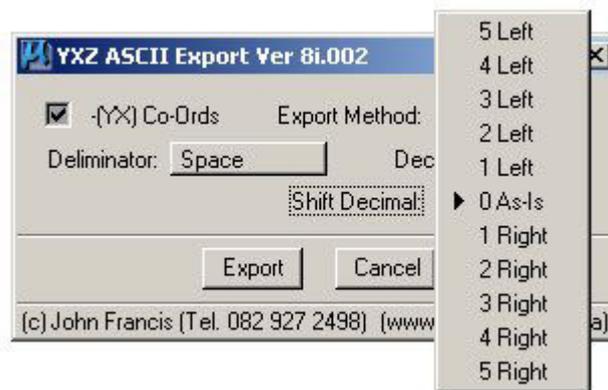

Fig. 25: Exp-NYXZ Decimal Options

Inspection of the resultant ASCII File values, it may be noted that the decimal place may be shifted from its correct position. This may occur if the working units of the file are not in the standard 'Eskom Format' (i.e. 100:1). The 'Shift Decimal' option is provided to compensate for this occurrence, if required.

III.3.i   Export Extra Formats to ASCII File

In the JafTools Dialog Box, select 'Survey->Exp-Extras'.
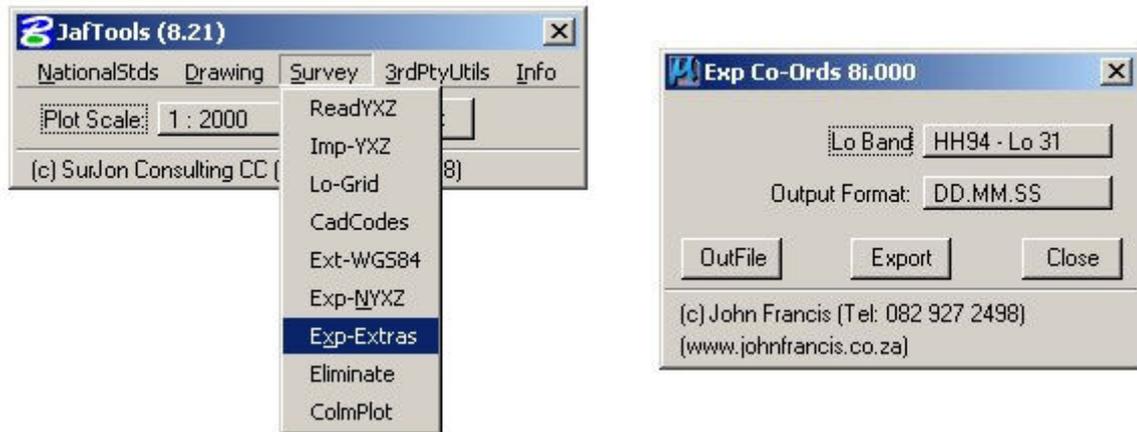
This utility will extract TEXT items within a fence, to an ASCII file, in various formats as per your selection below:

These formats are self-explanatory, except for the GARMIN Cvt format. This format is for importing co-ordinates into the Garmin MapSource software, as waypoints. The MapSource Software can then be used to transfer the "Waypoints" to a Garmin hand-held GPS receiver. The MapSource software is supplied with any Garmin GPS device, when purchasing such a device.

The file exported via this routine cannot be imported directly to the MapSource software, but must first be converted to a Garmin POI data format, which can be done using a freeware conversion utility called GPXtoPOI.exe, which is available as a free download at the following URL:
http://www.masterclass.com/gpxtopoi/gpxtopoidownload.html

III.4 INFO

People make mistakes, so these tools assist in rectifying some issues.

III.4.a Restore Default Cell Library

In the JafTools Dialog Box, select 'Utils-> Restore Default Cell Library'.

This will replace the default cell libraries required for JafTools to function correctly. Use this when the required cells do not appear in your drawing when choosing to place them via the JafTools sub-menus.

III.4.b License Info
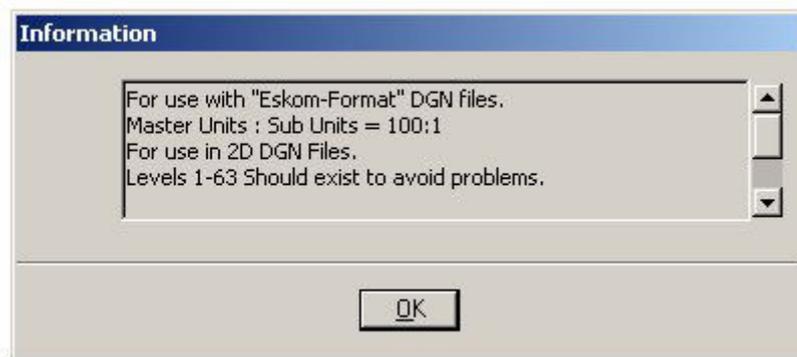
In the JafTools Dialog Box, select 'Info-> License Info'.
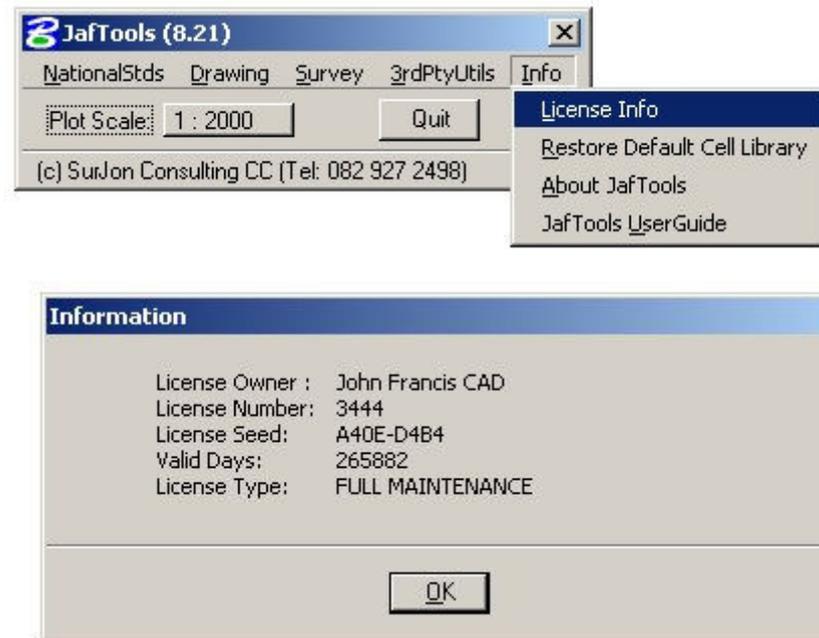
This will display information about the current license and its validity.
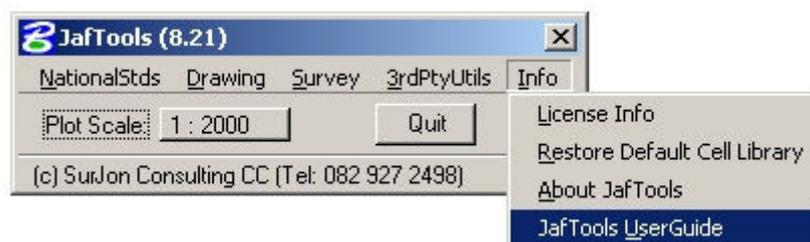
III.4.c   About JafTools

In the JafTools Dialog Box, select 'Info-> <u>A</u>bout JafTools'.

This will display some useful information to avoid problems when using JafTools.

III.4.d   JafTools UserGuide

In the JafTools Dialog Box, select 'Info-> JafTools <u>U</u>serGuide'.

This will display the JafTools-V8 User Guide, a PDF Document.

PART IV   <u>THIRD PARTY APPLICATIONS</u>

These applications are available on the pull-down menu '3rdPtyUtils'.

These are applications written by other sources/companies. The intention is to provide access to other third party developers' programs that may be useful. These applications were not written by JAF, and are therefore not supported, but are included as-is, hopefully making somebody's life a little easier in the long term.