

SURPAC Ver 5.35 for Windows XP/Vista - Diagram Creation/Plotting

File General Conversions Least Squares Topographical Engineering Mining Cadastral Help

Edit Edit Frame Figure Line General Name Psn Point Image Text Import Drawing Help

Zoom (%) 100% Figure Swing 00° Press Mouse (RHB) or Space Bar for Menus

LEASE AREA DIAGRAM

SIDES Metres	DIRECTION	CO-ORDINATES Y System: VG 27° X		S.G. No.	
Constants:		± 0,00 +2800 000,00			
AB	28,19	235 41 00	A -37 428,14	+39 028,62	Approved for SURVEYOR-GENERAL Wet / Act No.70/1970 Art / Sect 3(e) Sheet 1 of 2 sheets
BC	106,15	291 23 00	B -37 451,42	+39 012,73	
CD	344,91	279 16 40	C -37 550,26	+39 051,43	
DE	128,98	83 38 30	D -37 890,66	+39 107,04	
EF	43,93	90 38 20	E -37 762,87	+39 121,28	
FG	92,09	118 04 00	F -37 718,94	+39 120,79	
GH	23,79	100 21 50	G -37 637,68	+39 077,46	
HJ	54,44	90 58 40	H -37 614,29	+39 073,14	
JK	16,78	78 33 20	J -37 599,86	+39 072,21	
KL	199,42	348 35 00	K -37 543,41	+39 075,54	
LM	30,24	10 34 30	L -37 582,88	+39 271,01	
MN	45,84	40 09 00	M -37 577,33	+39 300,74	
NP	23,96	32 22 10	N -37 547,77	+39 335,78	
PQ	29,11	351 18 30	P -37 534,94	+39 336,02	
QR	263,68	342 46 20	Q -37 539,34	+39 384,80	
RS	32,04	261 39 20	R -37 617,43	+39 636,65	
ST	18,46	311 37 10	S -37 649,13	+39 632,00	
TU	76,88	340 08 20	T -37 682,93	+39 644,26	
UV	166,91	90 03 10	U -37 689,05	+39 716,57	
VW	252,83	180 15 50	V -37 522,14	+39 716,42	
VX	285,30	169 47 20	W -37 523,31	+39 463,59	
XY	50,92	119 08 00	X -37 472,73	+39 162,61	
YA	129,40	179 57 10	Y -37 428,25	+39 158,02	
CONNECTING	DATA	Z	-36 768,13	+40 050,47	
VZ	824,69	66 06 20	A1	-39 001,17	+39 772,46
UA1	1 313,31	272 26 21	Δ	-38 937,06	+42 014,99
		Δ	-33 829,63	+39 402,07	

Description of Beacons
Z A1 : Iron Pipe in Truncated Concrete Pyramid
All other Beacons : 16mm Iron Peg

The figure **ABCDEFGHIJKLMNPQRSTUUVWXY** represents **6,7501 hectares** of land being a Lease Area over the Farm **TURFFONTEIN No.302-JQ**

North-West Province
Surveyed in August 2004 to March 2007 by me

Joe Soap
Professional Land Surveyor

This diagram is annexed to	The original diagram is	File :
No. :	S.G. No. : 103/1894	S.R. :
d.d. :	Transfer T 10/1858	G.P. :
L.f.o. :	Grant :	Comp. : JQSG-42
Registrar of Deeds PRETORIA		T.P. :

LEASE AREA DIAGRAM

a Lease Area over the Farm
TURFFONTEIN No.302-JQ

Scale 1:5000

S.G. No.

Approved

for SURVEYOR-GENERAL

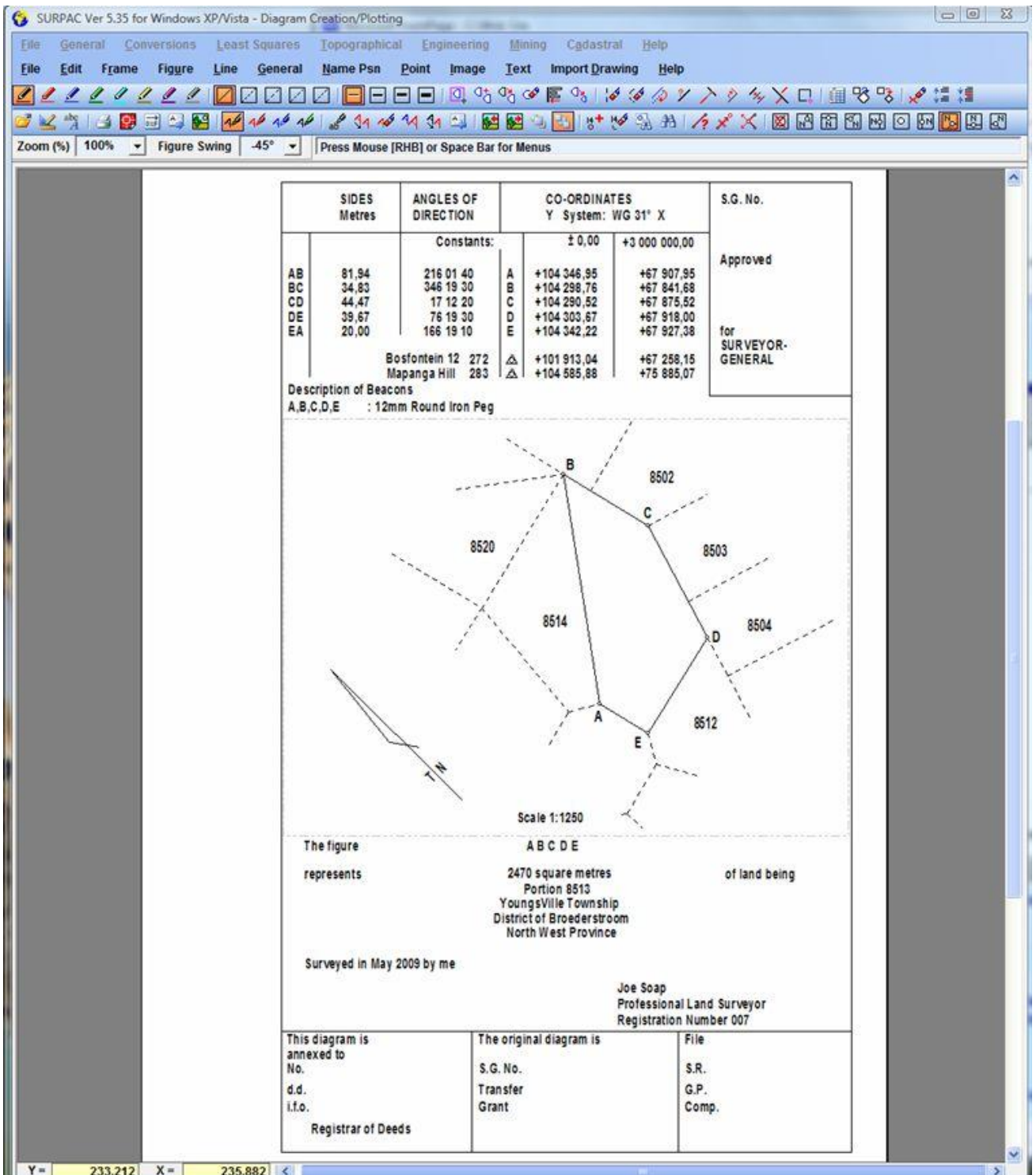
Sheet 2 of 2 sheets

Surveyed in August 2004 to March 2007 by me

Joe Soap
Professional Land Surveyor

Y = 204,698 X = 238,217

Portion of an A3 Diagram under construction



Portion of an A4 Diagram, using data imported from a SURPAC Working Plan



The Diagram CAD Application



This CAD application incorporates specific functions for the creation of Diagrams. The format of the Diagrams created conforms with the requirements of the Surveyors General in all provinces of South Africa, in Namibia, Swaziland, Lesotho, Zimbabwe, Malawi and

Zambia.

- Any number of Diagrams may be created for a given Co-ordinate File.
- A created Diagram may vary in size from A4 to A0.
- The basic Diagram form layouts for the different provinces and countries are incorporated in the application. For South Africa, the Diagram headings are available in English or Afrikaans.
- Diagram Data and Figural plot may be generated from :-
 - A Co-ordinate File,
 - A SURPAC General CAD Plotting Sheet (including Line and Text data for the figure and surrounding data),
 - A SURPAC Working Plan (including Line and Text data for the figure and surrounding data),
 - importing from a DXF file.
- Apart from the Main Figure of the Diagram, Users may specify data for :-
 - Connecting Data,
 - Indicatory Data,
 - Servitude Data,
 - Excluded Data, and
 - Trig. or TSM Data.
- Other options include :-
 - Defining the Diagram as a Line (Servitude) Diagram,
 - Defining the Diagram as a Compilation Diagram,
 - Selecting or deselecting the display of the Diagram Co-ordinates.
- Once generated, the Diagram Figure may be :-
 - Dynamically re-positioned,
 - Dynamically re-scaled, or
 - Dynamically re-oriented.
- A variety of Line and Text related functions may be employed for completing the Diagram information, surrounding data etc.
- Using simple mouse or keyboard commands, the on-screen view of a Diagram may be :-
 - Zoomed Up,
 - Zoomed Down,
 - Zoomed to a defined window,
 - Zoomed to the defined Plotting scale,
 - Zoomed to a User defined scale,
 - Rotated positively or negatively,
 - Panning or scrolling the display
- The Diagram application functions are accessible from :-
 - a Drop Down Menu system,

- a Tool Bars system (that includes most of the common functions), or
- using Single or Double Keyboard entered commands.
- The standard CAD functions included are :-
 - Line construction/editing :-
 - Draw using various colours, widths and styling,
 - Generate (using Polar data),
 - Replicate,
 - Dimension,
 - Trim/Snap,
 - Subdivide,
 - Draw arrows, rectangles, arcs.
 - Point functions :-
 - Add, Edit or Delete a Point,
 - View a Point's information
 - Calculate Polars,
 - Calculate Joins,
 - Calculate Intersections,
 - Circle and Name Points (i.e. Block Corners etc.)
 - Text functions :-
 - Write a Text Item using any Font, any Size, any Direction, any compaction or styling,
 - Edit or Delete a Text Item,
 - Dynamically Move a Text Item,
 - Dynamically Copy a Text Item,
 - Dynamically Resize, Position and/or Orientate a Text Item,
 - Import Text Items from an ASCII file,
 - Reset the attributes of all, or selected Text Items.
 - Graphic Image functions :-
 - Import Graphic Images (BMP, JPEG, GIF, ICO, WMF or EMF formats)
 - Create Graphic Image of Sheet, or portion of the Sheet (BMP format)
 - Flip an Image (Horizontal, Vertical or both)
 - Set Images to be in front of, or behind, drawing information
 - Move an Image
 - Re-Size an Image
 - Shift an Image
 - Use the SURPAC "Frame" function to :-
 - Copy defined a block of Data from Position to Position,
 - Move a defined block of Data from Position to Position,
 - Delete a defined block of Line/Text data,

- Create an Inset at a User defined Scale,
- Align a defined block of Text Items (Left/ Centre/ Right Justify, plus horizontal spacing),
- Rotate a defined block of Data,
- Zoom Up, or Zoom Down, a defined block of Data,
- Store and recall Data Blocks from disk for repeated Sheet application.
- Output of the Diagram to :-
 - A Printer or Plotter,
 - An ASCII File,
 - A HPGL File, or
 - A DXF File.
- The specific Diagram CAD functions are :-
 - Carry out an automatic Data and Consistency calculation,
 - Compute the Figure Area,
 - Move the Figure (Dynamic),
 - Scale the Figure (Dynamic),
 - Orient the Figure (Dynamic),
 - Insert a Data Line,
 - Delete a Data Line.
 - Setting an Erasure Polygon for :-
 - Erasing Lines,
 - Erasing Text Items,
 - Erasing Points, or
 - All Data.
 - Displaying a North Point.