Isometric Projection

This is a similar projection to axonometric projection but the angles are at 30°. The corners of the figure are not at right angles and it is, therefore, not a true plan; the result is a rather distorted image. However, for certain shapes you will find it most useful. See Drawing D23. Circles in this case will appear as ellipses. See Figures 2 and 3 in Drawing D23.
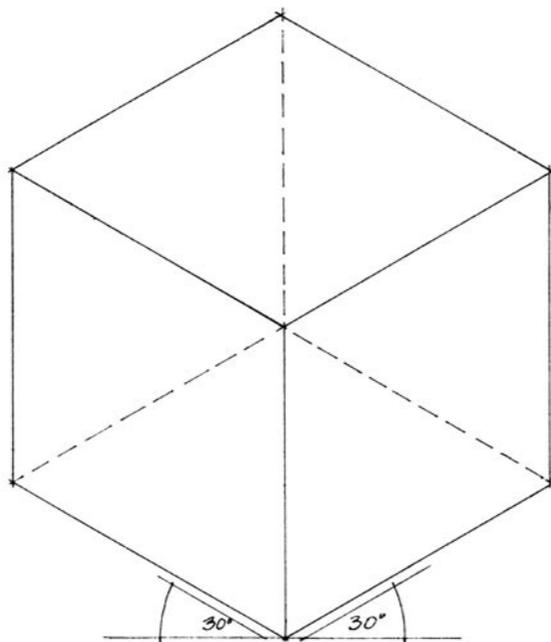
Drawing **D23**
Isometric Projection

Figure 1
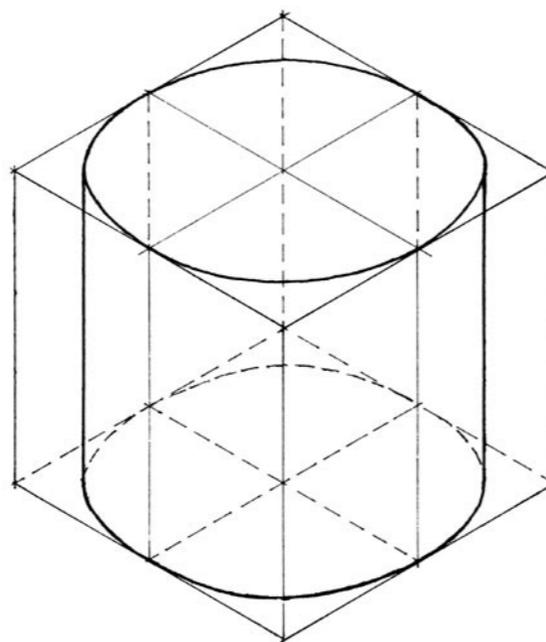Projection of true square produces a hexagon

Figure 2
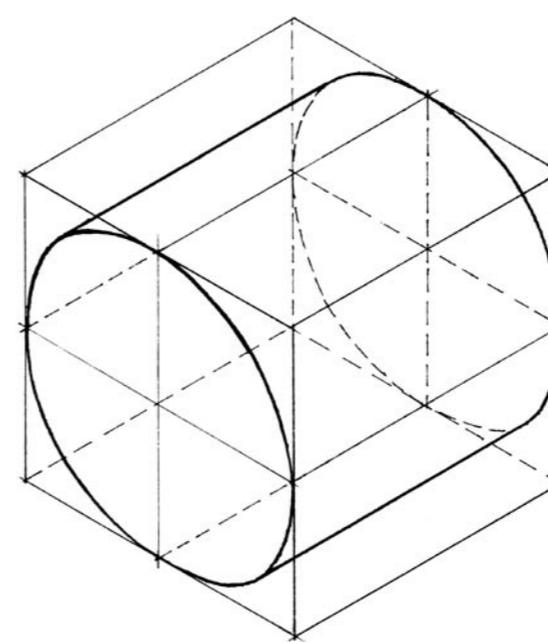Circles on plan appear as ellipses

Figure 3
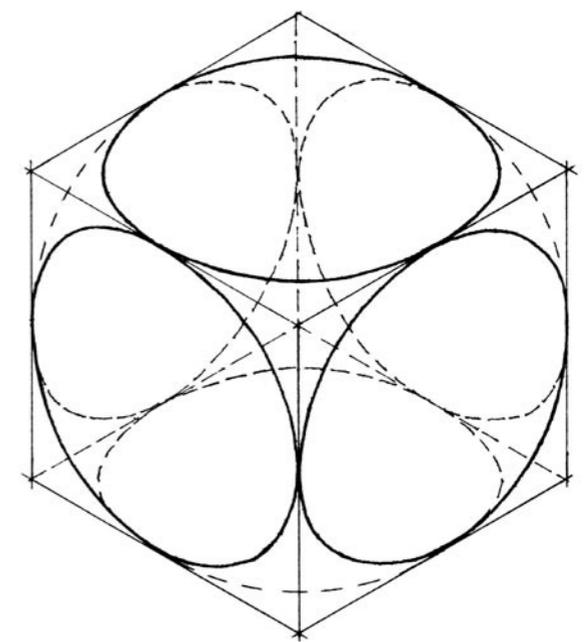Circles on elevation appear as ellipses

Figure 4
Circles shown on plan and all elevations

distance apart for each line of lettering, or you will get an uneven appearance which will look very unprofessional. Use different size lettering for different types of notes if you wish to bring out particular important points, but always use larger lettering for the main title and sub-headings.

In countries such as the US, lettering should be done without serifs, but in all events the use of simple, clear block lettering is important to master. The use of guidelines for hand lettering is critical and should always be used in association with presentations and/or drafting. Well developed hand lettering is difficult to master, but it can make or break your presentations.

When lettering, set up the guidelines and use a set square/triangle and tee square or parallel bar to keep the vertical and horizontal lines straight. Additionally, only capital letters are used. Excellent hand lettering is a true craft and it must be honed.

The spacing of letters is most important, and good spacing is decided by a visual equalizing of the distances between the letters that is obtained only through practice. Don't bunch all your letters together or put them so far apart that you have to spell out each letter before you can make out the word: try to arrive at a happy medium.
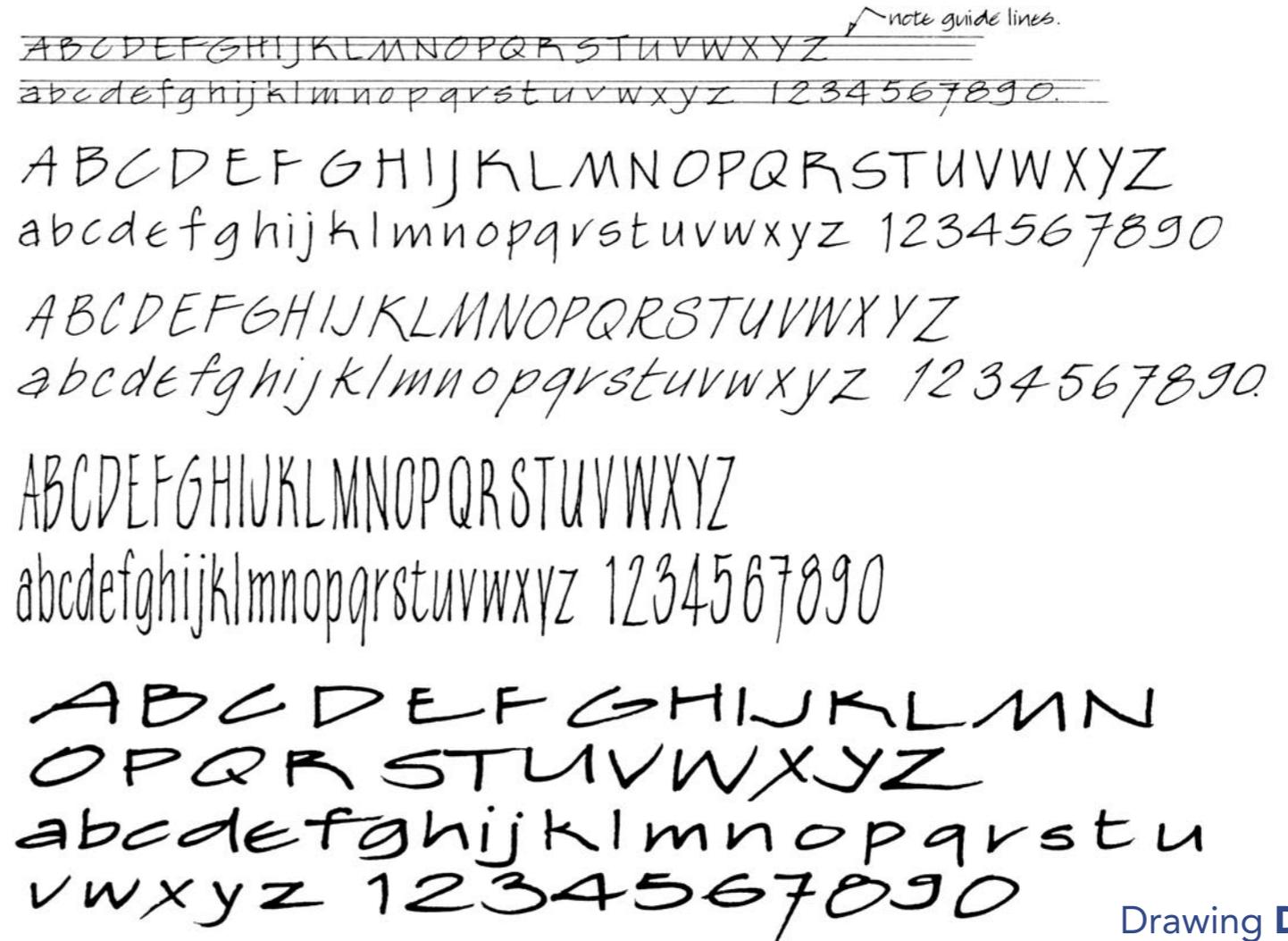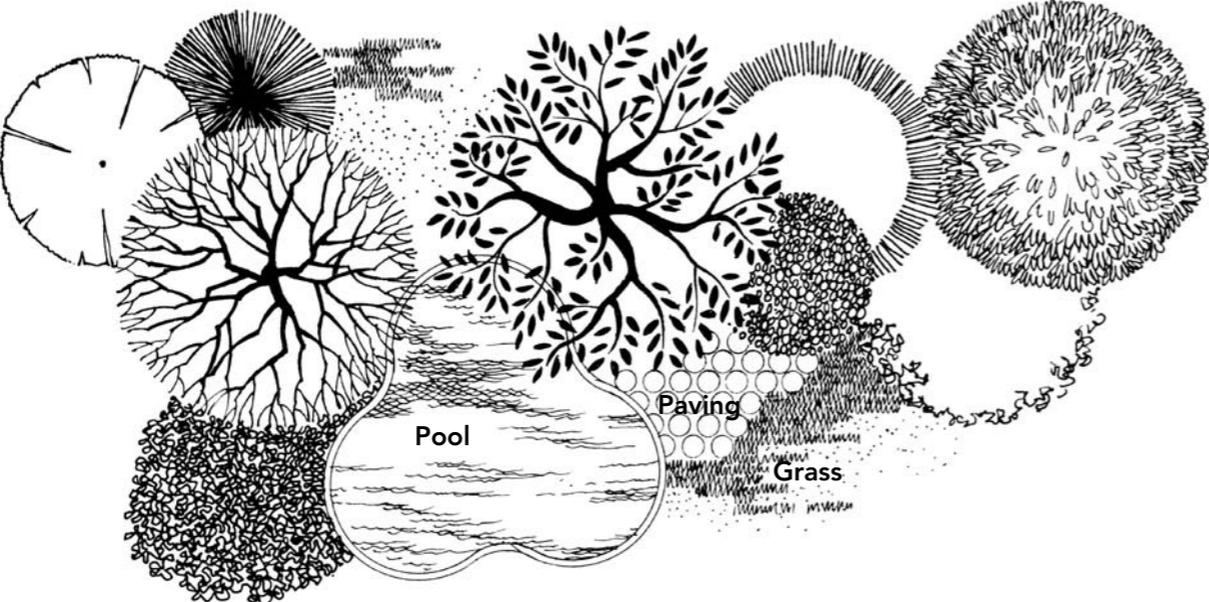

Drawing **D27**

Drawing **D37b**

Graphical Symbols

North Points

Trees
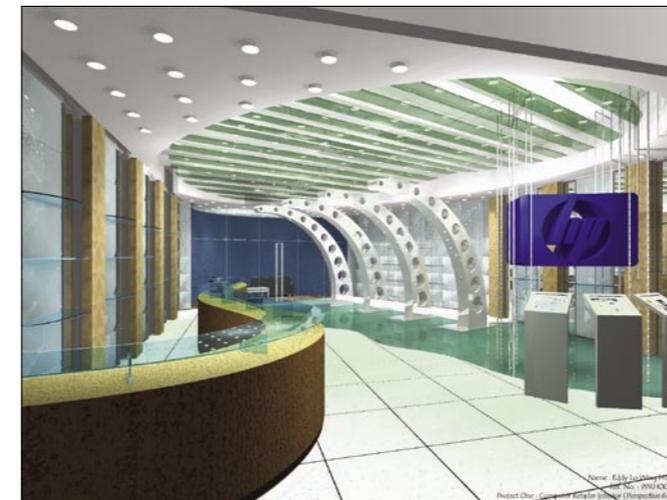

Pool

Paving
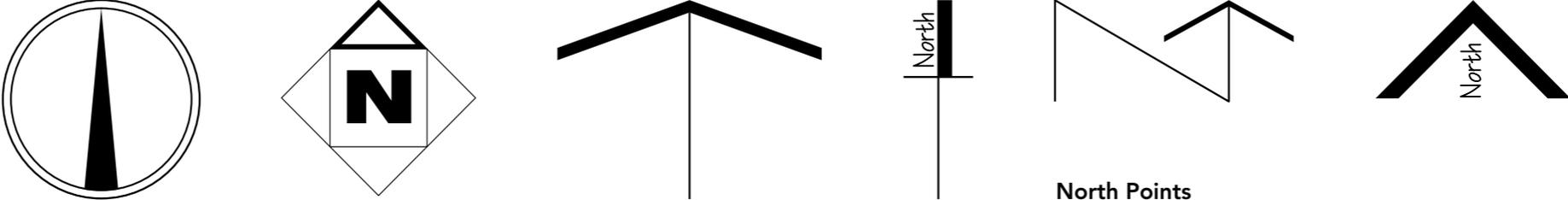
Grass

Shrubs

Conclusion

Learning a CAD program and eventually getting confident and up to speed with drawing effectively with CAD generally starts with reference to the manual accompanying the program purchased. It is common to dispense with the printed manual and instead to include the documentation on a CD ROM or DVD that comes with the package. There is a wealth of CAD packages available on the market, and often a bit of research is needed before making the decision as to which program to purchase.

It is very important to remember that a proficiency in using a computer and a CAD program will not automatically make the operator a better designer. At the end of the day, CAD, though powerful and versatile as it may be, will only serve as a time- and cost-saving tool and not as an enhancement to one's design creativity. By persevering and learning the CAD software to hand, one can effectively "record" one's creativity and design ideas quickly and accurately and thus in theory have more time to get creative.

There follow some examples of CAD drawings rendered by Eddy Lo, a Rhodec/London Metropolitan University Bachelor of Arts graduate. The drawings are taken from his actual BA project work, and are reproduced with his kind permission.

Project 1
3D