

OA Mapping Committee Meeting

23rd April 2011, 4.10pm

Room 3, Beverley District High School, 20 John St, BEVERLEY, WA

Chair: Adrian Uppill

AGENDA

Present: Alex Tarr, Terry Bluett, Gordon Wilson, Steve Doyle, Lance Reed, Hogh Moore, Peter Komyschan, Paul Hoopman, Lachlan Hallett, Robbie Preston

Apologies: Greg Hawthorne

Minutes of the previous meeting: Confirmed

Matters arising:

- 1 Revision of ISOM200 – AU advised that the revision has been delayed as per IOF MC Meeting 21-21 Jan 2011. AU also advised that he has had some discussions with Thomas Gloor, leader of the Revision Team.
- 2 Guidelines on the content of orienteering maps -- AU advised this is yet to be done.
- 3 Sprint mapping, difficulty in mapping split levels – No discussion.
- 4 OA map symbols & control descriptions (double sided sheet) – AU asked about the usefulness & purpose of these. Digital copies were emailed to the State / Ter Secretaries a couple of years ago. Suggestion that they be placed on the OA web page – agreed, AU to action
- 5 OA digital printing policy, out of date – AU advised this yet to be done, and partly waiting for draft on revision of ISOM as this should provide guidance & assistance.

New business:

- 1 Proposal to change 4 control descriptions symbols

AU referred to the proposal as per Attachment 1. Members considered it to be a technical matter rather than mapping, with AU advising that it is being considered by the Technical Committee but adding that this Committee should also consider. Clarification that this is a proposal for change at the International level, and if supported with in Australia then OA to consider with a view to making a submission to the IOF.

Majority view of members was that it has no objection to the control description proposal. Technical Director to be advised accordingly.

- 2 Map deviation request as advised by AU

Request by Richard Matthews, Controller, for approval to use ISOM symbol 209 Boulder Cluster on the 2011 Aust Sprint Prologue map as there is no equivalent symbol in ISSOM. This is bush sprint map in WA prepared by Alex Tarr. Approved by OA Mapping Officer.

- 3 Overprinting effect

AU advised that overprinting for laser printed maps has not been used in Australia to date but is something that should now be considered particularly as it is a requirement for World Ranking Events - see 'Guidelines for using non-offset printed maps in WRE' where 'the overprinting effect of spot colour printing has to be simulated'

NB Correction to Minutes: The statement that 'overprinting for laser printed maps has not been used in Australia' is incorrect. The Northern Spurs 1:10000 scale maps used for the 2009 Australian Champs held in Victoria used overprinting.

AU referred Members to the paper* 'Printing Technology for Orienteering Maps', Agnar Renolen, August 2010, which gives an account of current printing technology and how to apply transparency and overprinting to orienteering maps.

*A copy of the paper is on the OA web site, under Mapping.

AU also referred to his discussion paper "Overprinting effect printed direct from OCAD using a 4-colour laser printer", copy at Attachment 2

This is a complex subject requiring more research and time to discuss methods to achieve overprinting particularly in the Australian context.

4 Proposed workshop in conjunction with 2011 Aust Champs

AU advised that following the successful Technology Mapping Workshop held in Adelaide during the 2010 Aust Champs carnival in SA, another workshop possibly at the 2011 Aust Champs carnival should be conducted. General consensus that this is appropriate; with the topic to be on Printing (to include overprinting). Tentative date: *Thursday 6th October 2011, Canberra, 9am – 1pm.* AU to organise

5 OA Map statistics Form 6

Statistics for 2010 are now due.

| Numbers | SA | | ACT | | TAS | | VIC | | WA | | NSW | | QLD | |
|-----------------|--------------|-------------|-------------|------------|-------------|-------------|------------|------------|-------------|------------|--------------|------------|--------------|-------------|
| | Year | 2009 | 2010 | 2009 | 2010 | 2009 | 2010 | 2009 | 2010 | 2009 | 2010 | 2009 | 2010 | 2009 |
| ISOM | 6 | 3 | 5 | | 1 | 3 | | | 2 | | 21 | | 7 | 3 |
| ISSOM | 2 | 2 | 2 | | 0 | 2 | | | 3 | | 11 | | 0 | 3 |
| ISMTBOM | 4 | 0 | 0 | | 0 | 0 | | | 0 | | 2 | | 3 | 3 |
| Misc Colour | 12 | 7 | 0 | | 0 | 0 | | | 18 | | 0 | | 21 | 8 |
| Misc B&W | 0 | 0 | 0 | | 0 | 0 | | | 0 | | 0 | | 0 | 3 |
| Total | 24 | 12 | 7 | 0 | 1 | 5 | 0 | 0 | 23 | 0 | 34 | 0 | 31 | 20 |
| Area km2 | | | | | | | | | | | | | | |
| ISOM | 33.59 | 4.7 | 22.0 | | 10.0 | 23.0 | | | 30.0 | | 80.0 | | 40.5 | 3.0 |
| ISSOM | 0.92 | 9.0 | 1.7 | | 0.0 | 2.0 | | | 3.9 | | 5.5 | | 0.0 | 3.0 |
| ISMTBOM | 57.57 | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | | 60.0 | | 125.0 | 34.2 |
| Misc Colour | 7.59 | 1.5 | 0.0 | | 0.0 | 0.0 | | | 13.5 | | 0.0 | | 36.2 | 8.0 |
| Misc B&W | 0.00 | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | | 0.0 | | 0.0 | 9.6 |
| Total | 99.67 | 15.2 | 23.7 | 0.0 | 10.0 | 25.0 | 0.0 | 0.0 | 47.4 | 0.0 | 145.5 | 0.0 | 201.7 | 57.8 |

AU urged Associations to supply missing statistics.

6 For information – copyright issue, as advised by AU

Onkaparinga Hills & Wallaringa Orienteering Clubs (South Aust) were successful in challenging a copyright issue over tracks being 'transcribed' from its Belair National Park orienteering map. A payment in respect to the copyright issue was made to the Clubs by Department of Environment & Heritage and its consultants Taylor, Cullity & Lethlean

7 IOF publications and notes from Map Commission Meetings, as advised by AU

New publications produced during the last year include:

- Guidelines for using non-offset printed maps in WRE (on OA web)
- Printing Technology for Orienteering Maps, Agnar Renolen, August 2010 (on OA web)
- New ISMTBOM 2010 mapping specifications (on IOF web)

Notes from recent MC meetings

- A colour study, not yet published, helps with the revision of ISOM

- Next version of PrintTech test sheet will contain CMYK and PMS colours, overprinting examples and use standard G-Print 115 grain paper for all test prints. Nb Spicers (Adelaide) advise G-print not available, but similar paper is Impress DM Matt FSC
- Map generalization project also to help with revision of ISOM
- ISMTBOM is testing 4 alternative Ridable Area symbols and seeks feedback. Aust. feedback? Non received.
- MC denied WRE New Zealand 2011 to use 5 m contour interval for a sprint orienteering map. Nb Sprint specifications require the contour interval to be either 2.0m or 2.5m for both 1:5000 and 1:4000 scale maps.
- MC denied WRE Beograd Open 2011, Serbia, the scale 1:7500 for extended middle distance event.
- MC has denied several requests for WRE's to use the scale 1:10000 for long distance events

Any other business:

1 Discussion group

General discussion on how to share and find information about mapping: using Google Groups and other discussion groups ie Attack Point, the mapping pages of the OA web site, using Google to search out technical issues.

At the meeting RP set up an 'Australian Orienteering Mapping Group', using Google Groups, see here:

<http://groups.google.com/group/oamapping?lnk=srg&hl=en>

This is a forum for Australian (but not exclusively) orienteering mappers to share news and knowledge.

Also a suggestion to make the mapping pages more obvious on the OA web site. AU to follow up with RP.

2 Street Park maps

HM advised he and other mappers were greatly disappointed that after all the work involved in preparing a colour street park map that it was printed in B&W noting that the map had a colour logo of the sponsor on the back. Other examples noted of B&W maps used for street & park events. Some Associations always use colour maps.

Committee recommendation: Street & Park maps and Sprint maps should be printed in colour.

3 Traffic must be kept out of sprint orienteering areas

AT reminded members that IOF Sprint specifications require there to be 'no traffic' during sprint racing, and raised this concern in respect to street & park events.

Committee recommendation: Organisers and course planners be reminded of Sprint orienteering specifications requiring that traffic must be kept out of sprint orienteering areas (ISSOM rule 2.4) and by implication should also be considered in respect to street & park events.

Next meeting: Easter 2012 in Queensland

Attachments:

- 1 Proposal to change 4 control descriptions symbols

Proposal for discussion to modify the IOF Control Descriptions 2004

Prepared by Adrian Uppill, January 2011

One of the major changes resulting in the IOF Control Descriptions 2004 was to bring control names and descriptions into line with the International Specifications for Orienteering Maps 2000. However it is considered that further unification is warranted to minimize confusion between the control description symbols and the mapping symbols. Although experienced orienteers may have a good knowledge of the mapping and control description symbols, to the new orienteer or those unfamiliar with the international control symbols (as opposed to the text control description), some of the control symbols lack easy recognition as to their meaning or are inconsistent in shape when compared to the mapping symbols ie a small dot symbol represents a knoll for the control description but represents a boulder on the map! Modification of some control description symbols is therefore required.

Four symbols for control descriptions are proposed for modification:

(1) Knoll. To free up the dot symbol (to be used to represent a Boulder) which is currently used to represent a knoll on the control description, it is proposed that the dot symbol be replaced with an elongate dot. Hence the mapping features for a knoll (represented as a brown dot) and an elongate knoll (brown elongate dot) would then be graphically represented by an elongate dot for the control description.

Alternatively, a solid semi circle (representing the cross section shape of a mound or knoll) could be used if preferred over the elongate dot.

(2) Boulder. Replace the solid equilateral triangle with a dot which is the same graphical shape as used for the mapping symbol of a boulder.

(3) Boulder field. Replace the five small solid equilateral triangles with three randomly oriented solid triangles of similar proportion as the shape (side ratio of 8:6:5) of the area mapping symbol for boulder field.

(4) Boulder cluster. Replace the two overlapping equilateral solid triangles with a single solid equilateral triangle and being the same shape as used in the mapping symbols for a Boulder cluster.

The graphical representation of the four control description symbols with the corresponding map symbols for the feature described and how these are suggested for use are set out below:

| Control Descriptions 2004 (all black) | | | Mapping Symbols (ISOM2000, ISSOM2006) | |
|--|---|---|---|---|
| number & control description | (1) IOF symbol | (2) Proposed symbol | number & mapping description | |
| 1.10 Knoll |  |  () | 112 Small knoll (brown) |  |
| 2.4 Boulder |  |  | 113 Elongated knoll (brown) |  |
| 2.5 Boulder field |  |  | 206 Boulder |  |
| 2.6 Boulder cluster |  |  | 207 Large boulder |  |
| Others symbols remain the same ie | | | | |
| 1.9 Hill |  | | 208 Boulder field |  |
| 6.2 Special item |  | | 209 Boulder cluster |  |
| | | | 111 Knoll (contour symbols) |  |
| | | | 539 Special man-made feature (as defined) |  |

Summary

In conclusion it is proposed that four control symbols used in the Control Descriptions 2004 be changed as follows:

| | | | |
|---------------------|---|----|---|
| 1.10 Knoll |  | to |  |
| 2.4 Boulder |  | to |  |
| 2.5 Boulder field |  | to |  |
| 2.6 Boulder cluster |  | to |  |

2 Overprinting effect printed direct from OCAD using a 4-colour laser printer

Overprinting effect printed directly from OCAD using a 4-colour laser printer

Draft by Adrian Uppill March 2011

Background

The ‘Guidelines for using non-offset printed maps in World Ranking Events’, IOF, 2010, permits the use of laser printers for printing orienteering maps.

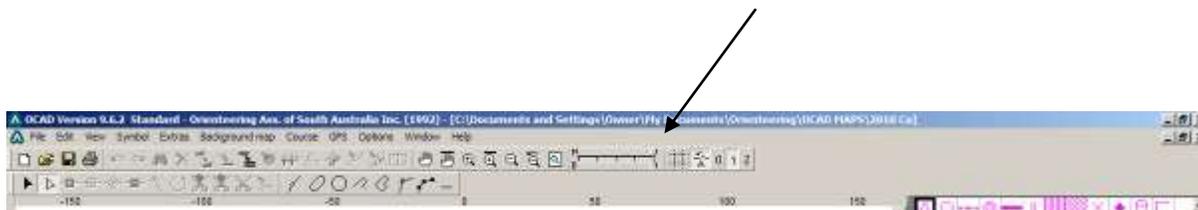
In particular the Guidelines require the ‘overprinting’ effect of spot colour printing to be simulated when using a four colour (CMYK) printer such as a laser printer. ‘Overprinting’ occurs when a specified underlying colour is not blocked out completely but blended in to produce a new colour.

OCAD is able to achieve the ‘overprinting’ effect. The methods to achieve ‘overprinting’ can be simple to relatively complex. Three methods are described when printing from an OCAD file to a laser printer:

Method 1: Standard Overprinting (Spot Colours)

a. Courses file

Set to Draft and move both sliders to the Right Hand Side ie View>Draft>Sliders to RHS



b. Background map

Set Background map (map file) to Spot colour ie View>Spot

In the 'Spot Colors' table ensure that the CMYK colour settings of the Appearance table are the same as the 'CMYK (process)' colour settings. Note that the CMYK (process) colour settings should be adjusted in order to match the colour output of the laser printer to the specified ISOM colours.

| V | No. | Name | Halftone freq | Halftone ang | Appearance | | | |
|---|-----|--------|---------------|--------------|------------|-------|-------|---------|
| | | | | | lpi | deg | Cyan | Magenta |
| | 0 | Black | 150.0 | 45.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| | 1 | Blue | 150.0 | 45.0 | 87.0 | 25.0 | 0.0 | 4.0 |
| | 2 | Brown | 150.0 | 45.0 | 0.0 | 56.0 | 100.0 | 45.0 |
| | 3 | Green | 150.0 | 45.0 | 76.0 | 0.0 | 91.0 | 0.0 |
| | 4 | Yellow | 150.0 | 30.0 | 0.0 | 20.0 | 80.0 | 0.0 |
| | 5 | Purple | 150.0 | 45.0 | 30.0 | 100.0 | 15.0 | 0.0 |
| | 6 | Gray | 150.0 | 45.0 | 0.0 | 0.0 | 0.0 | 40.0 |

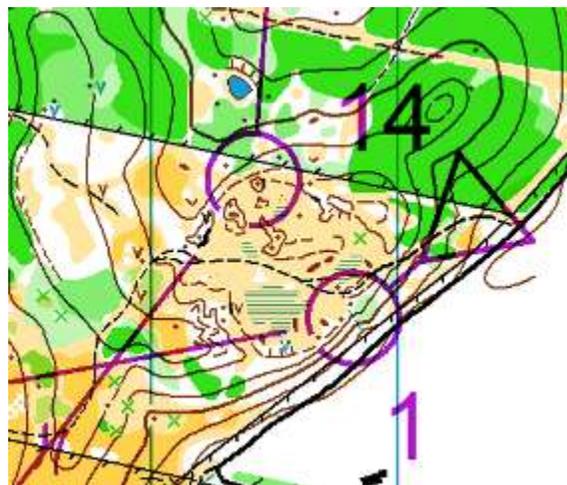
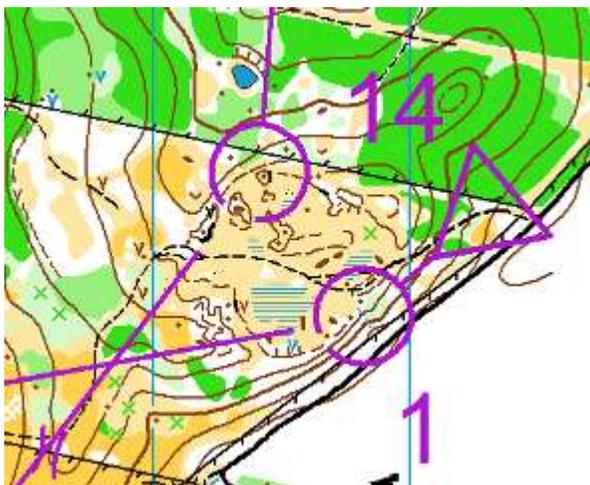
Table 1 'Spot Colors'

| No. | Name | CMYK (process) colors | | | | Trans | Spot colors | | | | | | | |
|-----|-----------------------|-----------------------|---------|--------|-------|-------|-------------|------|-------|-------|--------|--------|------|-----|
| | | Cyan | Magenta | Yellow | Black | | Black | Blue | Brown | Green | Yellow | Purple | Gray | |
| 11 | Purple | 30 | 100 | 15 | 0 | 100 | | | | | | | 100 | |
| 18 | Dark blue | 100 | 100 | 0 | 5 | 100 | | | | | | | | 100 |
| 0 | Black | 0 | 0 | 0 | 100 | ✓ 100 | 100 | | | | | | | |
| 15 | Street infill | 0 | 28 | 50 | 15 | 100 | | | | 50 | | | | |
| 25 | Street borderlines | 0 | 0 | 0 | 100 | 100 | | | | | | | | |
| 2 | Blue | 87 | 25 | 0 | 4 | ✓ 100 | | 100 | | | | | | |
| 3 | Blue 50% | 43 | 5 | 0 | 0 | 100 | | | | | | | | |
| 4 | Brown | 0 | 56 | 100 | 45 | ✓ 100 | | | 100 | | | | | 0 |
| 12 | Yellow 100%/Green 50% | 38 | 27 | 100 | 0 | 100 | | | | | 90 | 100 | | |
| 6 | Green | 76 | 0 | 91 | 0 | 100 | | | | | | 100 | | |
| 7 | Green 50% | 38 | 0 | 50 | 0 | 100 | | | | | | 60 | | |
| 8 | Green 20% | 15 | 0 | 20 | 0 | 100 | | | | | | 30 | | |
| 5 | Brown 50% | 0 | 28 | 50 | 15 | 100 | | | | | 50 | | | |
| 21 | Brown 20% | 0 | 14 | 25 | 7 | 100 | | | | | 20 | | | |

Table 2 'CMYK (process) colors and Spot Colors'

Advantages

Overprinting effect is achieved



No overprinting effect

Overprinting effect

Disadvantages

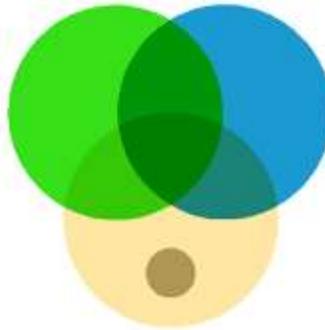
Only displays colours defined for Spot Colour printing hence other colours used in logos or created in the CMYK (process) table will not be displayed.



Normal view

Spot Colour view

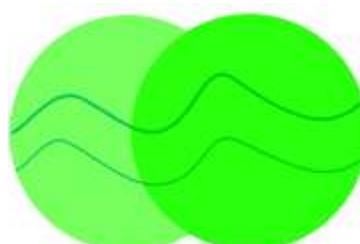
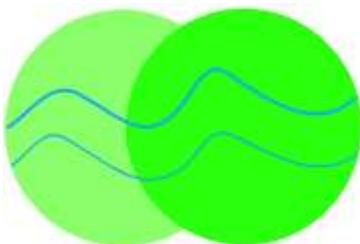
Overlapping of area symbols is not permitted as the overlapping part for certain colours will result in a colour change when set to Spot View. NB Good drafting practice dictates that overlapping areas must be avoided by using the 'Cut Hole' or 'Cut Area' drafting tools of OCAD.



Normal View

Spot Colour View

The colour Blue is difficult to read in mid and dark Green areas when set to Spot view.



Normal View

Spot Colour View

Method 2: Modified Overprinting (Spot Colours & Normal Colours)

a. Courses file

Set to Draft and move both sliders to the RHS ie View>Draft>Sliders to RHS

b. Background map

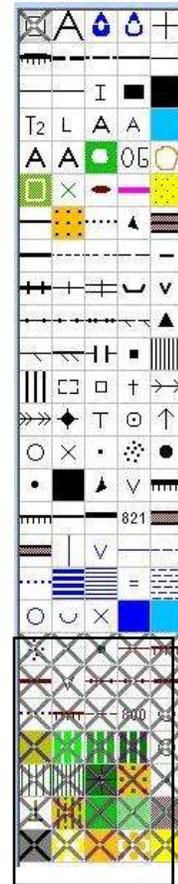
After sorting the symbol table according to colour, create two map files A & used as Background files in the CS file

(1) Map A - Set to Normal colours

- Hide the colours Brown, Green, Yellow & Grey ie any colour to be overprinted

(2) Map B - Set to Spot colours

- Position below Map A in Background map



B to be

options

Advantages

Overprinting effect achieved.

Keeps all colours used in logos and created in the CMYK (process) table

Legibility of Blue in Green is maintained

Disadvantage

Uses colours as defined in the Spot Colour table

Overlapping of area symbols is not permitted

Method 3: Complex Overprinting (Normal Colours)

This method requires the creation of three Map files with certain symbols hidden according to colour as per the table below:

| | Pur | Logos | Blue | Black | Brown | Green | Yellow | Grey | Slider |
|-------|-----|-------|------|-------|-------|-------|--------|------|--------|
| Cs | Y | | | | | | | | Draft |
| Map A | | Y | Y | Y | X | X | X | X | Normal |
| Map B | | X | X | X | Y | X | X | X | Draft |
| Map C | | X | X | X | X | Y | Y | Y | Normal |

Y = Display X = Hide

a. Courses file

Set to Draft and move both sliders to the RHS ie View>Draft>Sliders to RHS

b. Background map

After sorting the symbol table according to colour, create three map files and hide symbols for each file as per table. The hidden symbols for each map A, B & C are shown to the left. Note that some of the symbols at the top of the table include additional symbols mostly used in logos.

(1) Map A - Set to Normal colours

- Hide the colours Brown, Green, Yellow & Grey ie any colour to be overprinted (ie displays Blue, Black and logo colours)
- Position at top of Background Map Options

(2) Map B - Set to Draft mode

- Hide all colours except Brown (ie displays Brown features only)
- Position below Map A in Background Map Options.

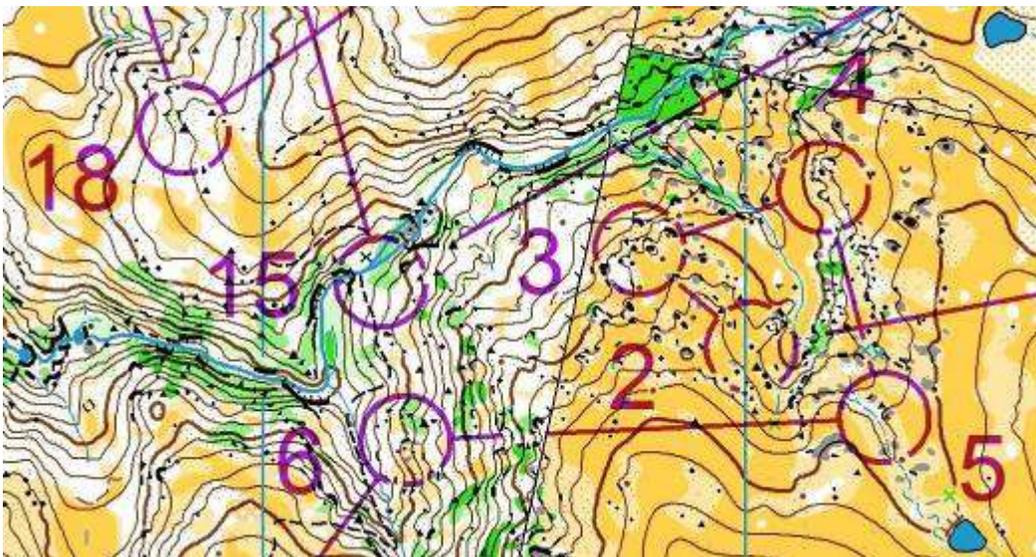
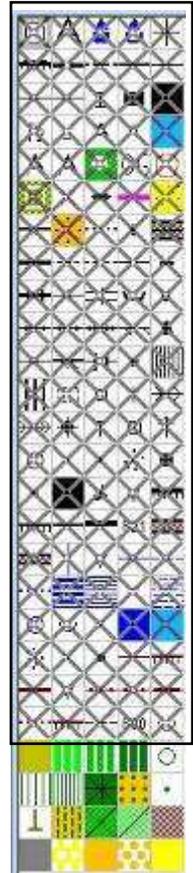
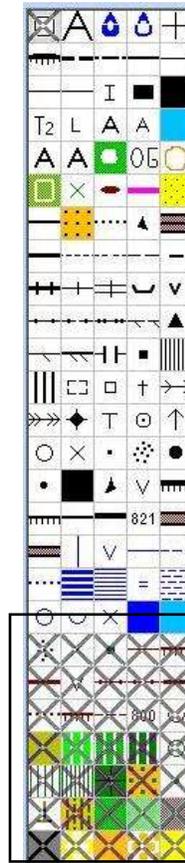
(3) Map C - Set to Normal mode

- Hide all colours except Green, Yellow & Grey (ie displays Green, Yellow & Grey features)
- Position below Map B in Background Map Options

Map A

Map B

Map C



Advantages

Overprinting effect achieved.

Does not use Spot colours and associated adjustments to the Spot colour table

Keeps all colours used in logos and created in the CMYK (process) table

Legibility of Blue in Green is maintained

Permits overlapping of area symbols (not a recommended drawing practice)

Disadvantages

Relatively complex to set-up

Involves 3 map files