

Why do we need mapping specifications (standards)?

What are they?

Why do we need mapping specifications / standards?

What's the difference?
 Standard: something used as a measure or model in comparative evaluations
 Specification: a detailed description of dimensions, materials, etc.

Why are they needed?
 (a) The competition must be the same for all competitors.
 Accurate and legible maps enhance equality.
 Specifications help ensure uniformity and map legibility.

(b) Orienteering is an international sport,
 so a common approach to drawing maps is essential.

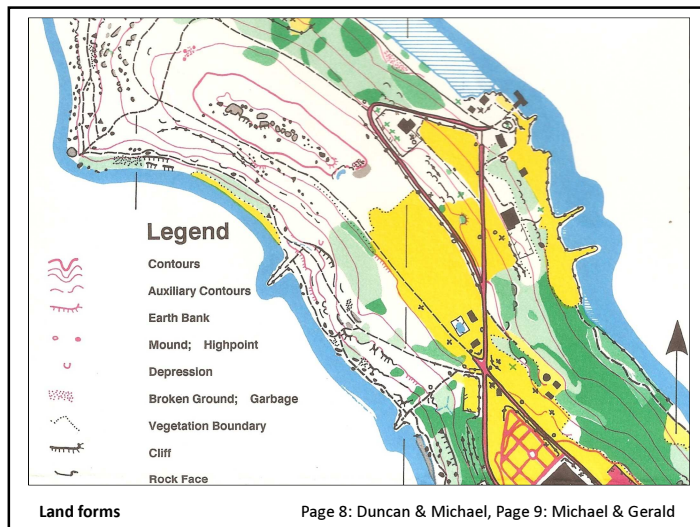
- For the mapper, standards can be helpful
- Especially by specifying what to map and how to map it (e.g. rock features)
- But even at international levels they are sometimes ignored http://www.attackpoint.org/discussionthread.jsp/message_674122
- But standards are difficult to create and maintain
- There are many (many) steps:
 - (1) Proposal (do we need changes?)
 - (2) Preparation (submissions from stakeholders)
 - (3) Committee stage (who?)
 - (4) Draft (many)
 - (5) Approval
 - (6) Publication (and awareness)

Colour

(Spot Colour printing and four colour printing are not included)

Colour	PMS colour	Cyan	Magenta	Yellow	Black
Black	Process black				100%
Brown	PMS 471		56%	100%	18%
Yellow	PMS 136		27%	79%	
Blue	PMS 299	87%	18%		
Green	PMS 361	76%		91%	
Grey	PMS 428				23%
Violet	Purple		100%		

From Gordon: Adrian Uphill can provide colour charts for comparison of colours from your printer with the standard. See <http://www.orienteeing.asn.au/technical/mapping/printingmaps/>



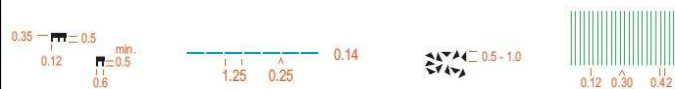
Pages 8 & 9

1. The numbers Ocad uses for symbols are actually ISOM numbers!!
2. It is permissible to alter the height of a contour by 25% if this will improve the representation of a feature.
3. Only one form line may be used between neighbouring contours (103)
4. Impassable earth banks should be drawn with the impassable cliff symbol (106)
5. The knoll symbol is used for "A small obvious mound or rocky knoll" (Diameter less than 5 m.) Use of this symbol for partially buried boulders is not mentioned. (112 & 113)



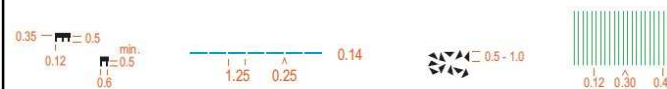
Pages 10 & 11

1. The termite mound cross is really a symbol for a special land form feature (which should be indicated in the legend). (118)
2. An impassable cliff is shown with downward tags. ISOM says the tags may be omitted if space is short (not for other reasons). (201)
3. Massive cliffs and boulders are shown in plan shape without tags (202)
4. The minimum height for a boulder is 1m (206)
5. When mapping boulder fields a minimum of two triangles should be used (207)



Pages 12 & 13

1. The symbol for stony ground (210) currently specifies that "The dots should be randomly distributed". In the current revision of the ISOM a dot screen has been specified. Australian mappers have appealed against this change.
2. Bare rock can be either 30% black, or grey which is 23% black. (212) (On Sprint maps it is 20% black.)
3. There is no symbol for mapping mangroves - but in Australia symbol 310 for a (distinct) marsh is often used. Is this potentially confusing?



Page 14 & 15

- Greens are defined by runnability e.g. mid-green is defined as "difficult to run" with a running speed of 20 to 60% of the normal speed.
- If yellow coloured areas dominate a map, a screen of 75% yellow may be used. (401) The colour for rough open is 50% yellow.
- Symbols that may be combined are on page 4

117 Broken ground	117 Broken ground	● Permitted combinations
210 Stony ground	210 Stony ground	
309 Uncrossable marsh	309 Uncrossable marsh	
310 Marsh	310 Marsh	
311 Indistinct marsh	311 Indistinct marsh	
401 Open land	401 Open land	
402 Open land with scattered trees	402 Open land with scattered trees	
403 Rough open land	403 Rough open land	
404 Rough open land with scattered trees	404 Rough open land with scattered trees	
406 Forest: slow running	406 Forest: slow running	
407 Undergrowth: slow running	407 Undergrowth: slow running	
408 Forest: difficult to run	408 Forest: difficult to run	
409 Undergrowth: difficult to run	409 Undergrowth: difficult to run	
410 Vegetation: impassable		

Pages 16 & 17

- Green crosses, open circles and dots can all be used for different vegetation features. (They must be defined in the legend.)
- A road under construction may be shown with broken lines. (Different to a sprint map.)
- There are different ways of showing distinct and indistinct path junctions (510 & 511)
- There are different ways of showing stream crossings with and without bridges (513 & 514)



Page 18 - 20

- With the ruined fence symbol (523), the gap is only 10% of the line, but often only fence posts exist, so the missing portion is 90%.
- The use of olive green is different to that for sprint maps:

527 Settlement
Houses and gardens and other built up areas. Roads, buildings and other significant features within a settlement must be shown. If all buildings cannot be shown, an alternative symbol (black line screen) may be used.
Colour: green 50% (60 l/cm) and yellow 100% or alternatively black 32.5% (27 l/cm).

Diagram showing symbols for settlement: Yellow (100%), Green (50%), and alternative BLACK (0.12, 0.25).

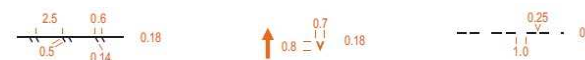
- Manmade features (539 O & 540 X) must be identified in the legend.



Interesting websites

Australia's submission to the ISOM revision committee
http://www.orienteing.asn.au/gfolder/ISOM_%20Revision_%20OA_%20Submission_%20181208.pdf

Comments on draft of ISOM revision:
http://www.orienteing.asn.au/gfolder/mapping/1_ISOM%20Draft.pdf



Further Comments / Questions?

