Challenges of sprint mapping

The ISSOM 2007 experience

ISSOM - history

2001: First WOC sprint
- Forest, application of ISOM2000 (not "park orienteering" section)

2003: WOC city sprint - ISSOM developed to better fit urban terrains
- Runnability and passability emphasized; Barriers: forbidden to pass; No underground courses; Main running level; No details in forbidden areas

2004: Draft version of ISSOM
- Barrier line symbols >= 0.4mm; Building fill: 50%-65%; Paved area fill: 0/10/20/30%

2005: First version of ISSOM
- Multilevel areas which cannot be mapped clearly are not suitable for IOF events; Different paved area fill and outline for non-urban / urban

2007: ISSOM 2007
- Consistency; minimum gaps (buildings)

ISSOM - principles

- Emphasis on passability and barriers
  - Degree of hindrance - black / dark
    - very thick lines: impassable
    - very thin lines: easily passable
  - ISOM problem
    - roads and paths (thick black lines)
- Emphasis on fairness:
  - Impassable means forbidden to pass
- Multi-level structures can not be used
  - "Main running level" represented
- Course setting is important!

Barriers - challenges

Barriers must be clearly visible and easily identifiable → Minimum width: 0.4mm; Colour: very dark

Issues:

203 Passable rock face (0.3mm)
 - too similar to impassable wall (0.4mm)

528.1 Forbidden area - too light, no thick outline

526.1 Buildings - gray with thin outline

Interplay between symbols - combined effect
• Contours and stairs in narrow passages
• Contours combined with other signatures
• Many thin black (line) symbols close together

Gaps (in barriers) - challenges

Gaps must be clearly visible and identifiable

Maximum contrast to barriers is needed

Gaps can't be too narrow

Types of gaps
- Gaps in line symbols
  - Openings in fences / walls / cliffs
- Passages through area symbols
- Between buildings / different types of forbidden areas
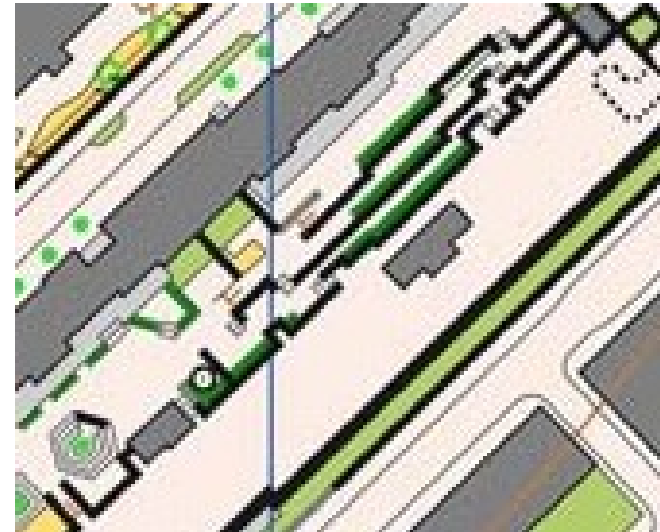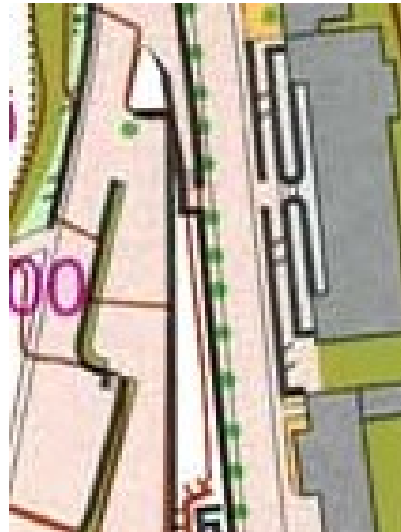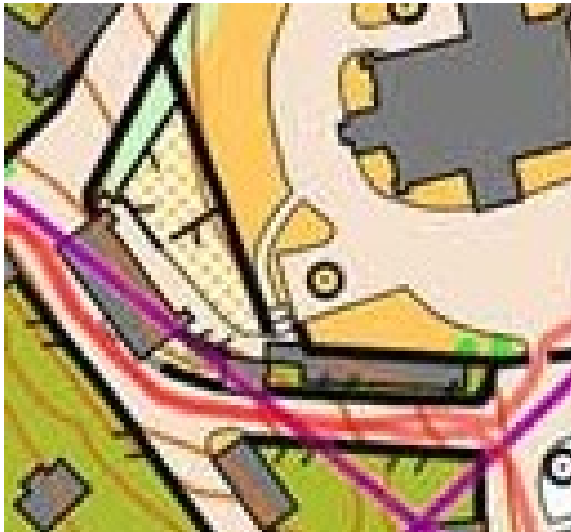- Gaps between barrier symbols (lines / areas)
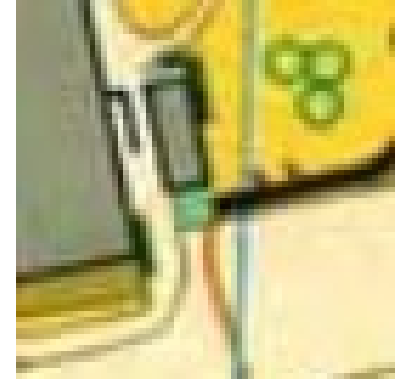
Gaps in lines need to be wide

Narrow lines in homogenous areas are easy to spot

Gaps between barrier symbols need to be wide

Gaps can be hidden / cluttered by "legitimate" symbols (contours, stairs, ...)
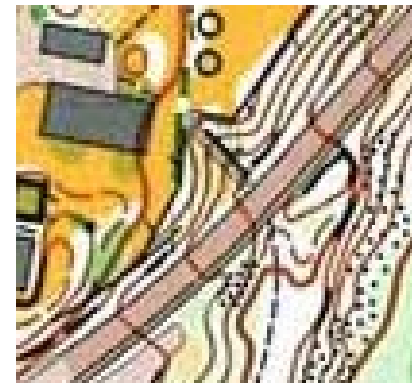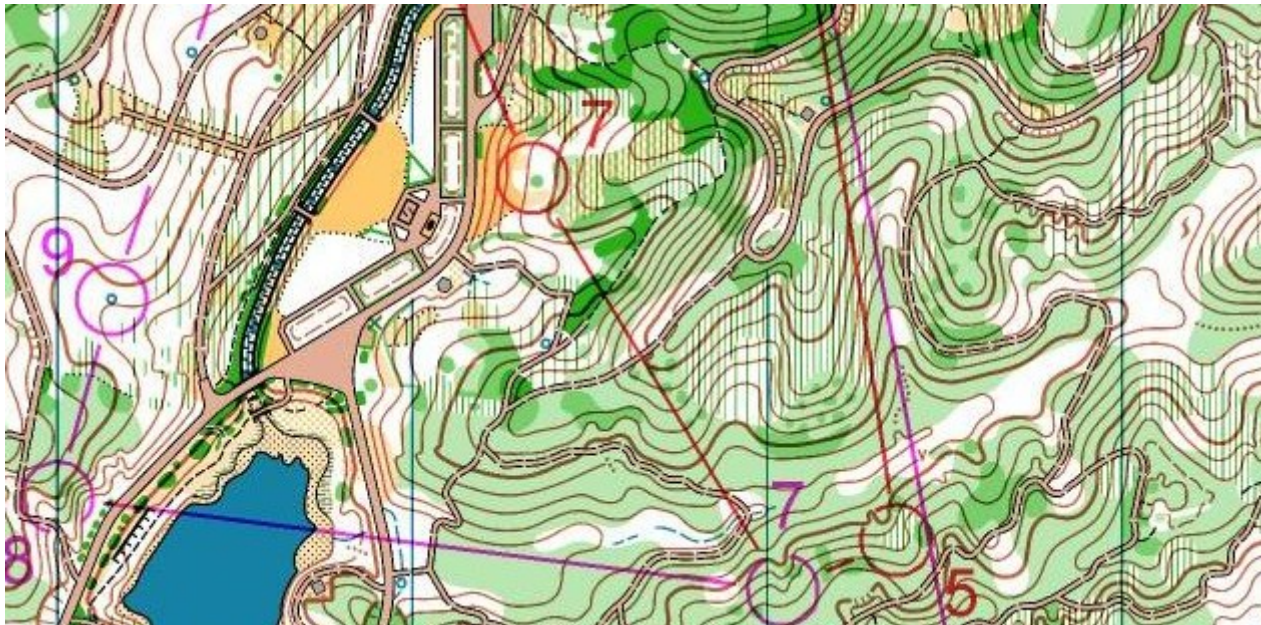
Is there a need for more minimum dimensions for gaps?

Examples

Path system

- Brown lines with thin black outlines can be difficult to see in areas with many contours
- ISSOM2005 introduced darker brown fill and thicker outlines for non-urban areas

Printing

- Map printing
  - CMYK printing without overprint effect is bad
    - Barriers/gaps can be masked out
- Course overprint
  - Barriers can be masked out if transparency is not implemented
  - Gaps can be hidden by the overprint
  - Control circles and lines must be cut so that important information is not hidden

ISOM - ISSOM

- ISSOM should differ as little as possible from the ISOM
  - The MC has this in mind when revising the ISOM