

# Symbol Dictionary for Topographic Map Production

## Four Colour Process

### National Mapping Division Geoscience Australia

Symbols are arranged in alphanumeric order by symbol number. The same number may be used for different symbols provided they have different spatial object types.

Hot spots and orientation are given for point symbols. The hot spot is the location on the symbol of the point feature in the database which the symbol represents. Where a value is given for orientation, the example in the symbol dictionary is aligned in that orientation. Where no value is given the orientation is not used for that feature and it is shown in the default orientation of 0.

For chain features the symbol is the length of the feature and centred on the feature unless otherwise stated. Measurements follow these conventions: for Point symbols the measurement will be to the outer boundary of the symbol unless otherwise indicated; for Chains measurements will be from line centre to line centre for spacing ticks etc and from line centre to the edge for tick lengths and verges. Both conventions for chains will be unless otherwise indicated.

Samples of screens referenced are given in the following section.

The statement "Colour: **C** --% **M** - - % **Y** - - % **K** - - %" stands for the percentages of colour used for the symbol creation in order of Cyan, Magenta, Yellow and Black.

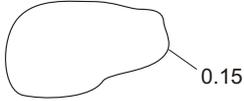
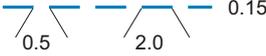
When not specifically stated it will be Colour: **C** 0% **M** 0% **Y** 0 % **K** 100%

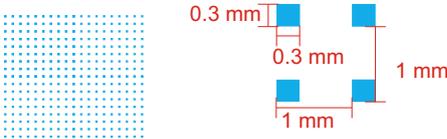
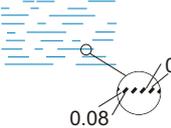
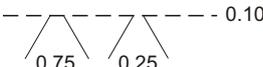
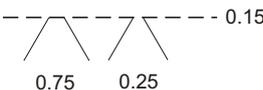
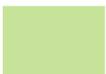
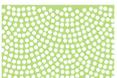
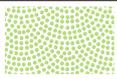
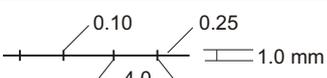
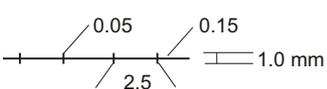
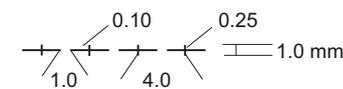
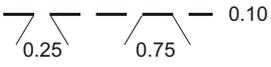
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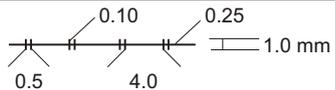
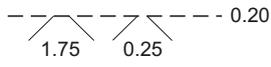
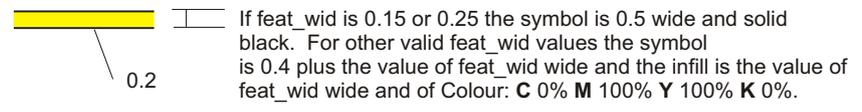
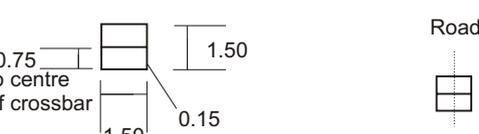
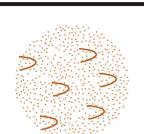
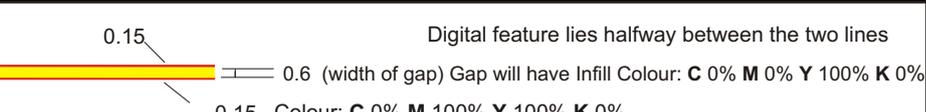
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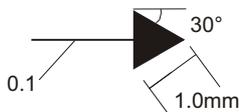
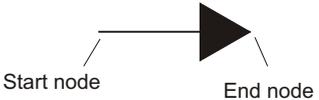
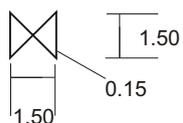
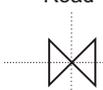
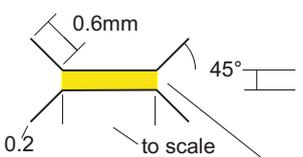
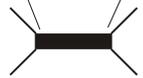
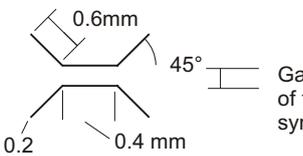
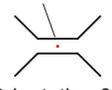
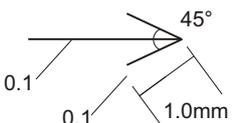
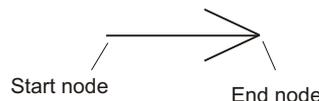
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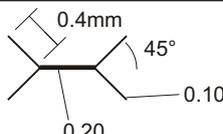
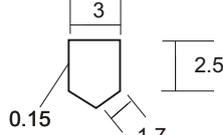
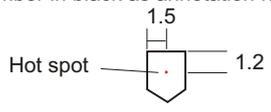
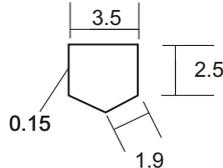
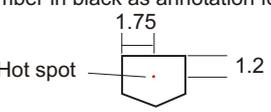
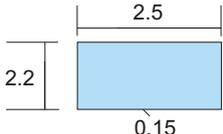
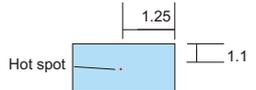
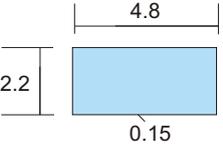
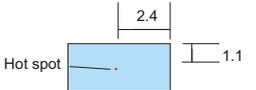
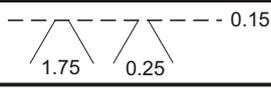
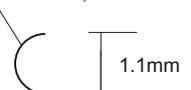
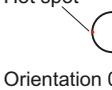
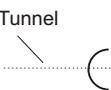
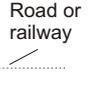
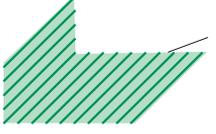
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Magenta	red filter	1.20+/- 0.05
Process Yellow	yellow filter	0.80+/- 0.05
Black	black filter	1.90+/-0.05

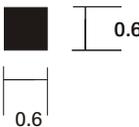
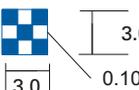
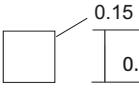
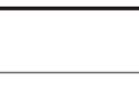
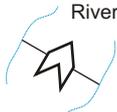
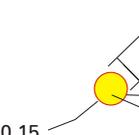
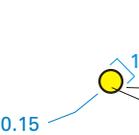
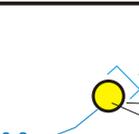
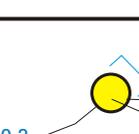
Symbol Number	Symbol Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
10	Polygon	Lake perennial Canal Area Watercourse Area perennial Reservoir Sea		Colour: <b>C 20% M 0% Y 0% K 0%</b>
102	Chain	Mine Boundary Line  Populated Place Boundary (WAC ONLY)		
102	Polygon	Mine Area		Colour: <b>C 0% M 0% Y 0% K 10%</b>
103	Point	Petroleum Well		Hot spot at the centre of the circle
106	Point	Mine Point		
11	Point	Bore		Hot spot at the centre of the circle Colour: <b>C 100% M 10% Y 0% K 10%</b>
11	Polygon	Lake non-perennial Watercourse Area non-perennial		Pattern: Equivalent to Screen Random Dot 1 Colour: <b>C 100% M 10% Y 0% K 10%</b>
111	Chain	Old Lake Bed Boundary  (WAC ONLY)		Colour: <b>C 100% M 10% Y 0% K 10%</b>
113	Point	Petroleum Well  (WAC ONLY)		
114	Chain	Waterbody Boundaries (Bounding salt evaporator & settling pond) Salt Evaporator Internal Line Settling Pond Internal Line		Colour: <b>C 100% M 10% Y 0% K 10%</b>

Symbol Number	Symbol Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
12	Polygon	Flood Irrigation Storage		Ordered Stipple Colour: <b>C</b> 65% <b>M</b> 0% <b>Y</b> 0% <b>K</b> 0%
14	Polygon	Land Subject To Inundation	 A minimum of two lines will be included in each polygon. Sufficient lines will be included in small polygons to indicate their shape. Note: The horizontal line will be broken by a line screen at 45°. Pattern: Equivalent to Screen SMW-4	Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%
170	Chain	Rubbish Tip (edge symbology)		
183	Chain	Conveyor		
2	Polygon	Forest Or Shrub All 250K or Closed (100K)		Colour: <b>C</b> 15% <b>M</b> 0% <b>Y</b> 43% <b>K</b> 0%
20	Chain	Ferry Route Line		
200	Polygon	Forest Or Shrub Dense		Colour: <b>C</b> 15% <b>M</b> 0% <b>Y</b> 43% <b>K</b> 0% Pattern: Equivalent to Screen:: DW-10
201	Polygon	Forest Or Shrub Sparse		Colour: <b>C</b> 15% <b>M</b> 0% <b>Y</b> 43% <b>K</b> 0% Pattern: Equivalent to Screen: DW-9
205	Chain	Railway and Road Tunnel Line		
206	Chain	Railway Single		Cross ties at 90° to the line and centred on the line
208	Chain	Railway Light		Cross ties at 90° to the line and centred on the line
209	Chain	Railway Abandoned		Cross ties at 90° to the line and centred on the line Gaps centred between cross ties
21	Chain	Ford Line		

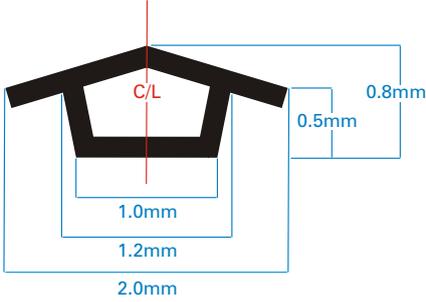
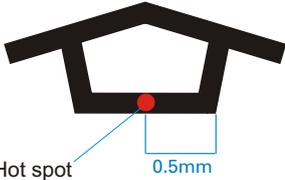
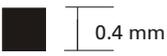
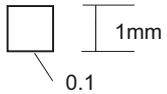
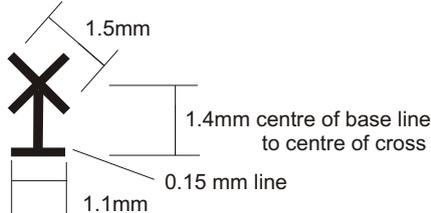
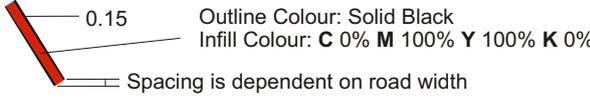
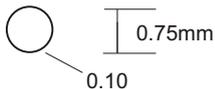
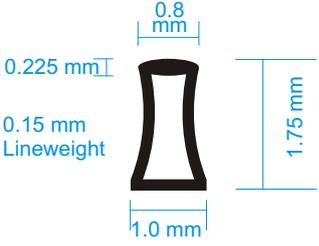
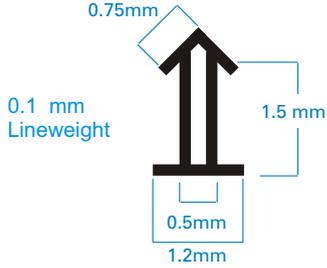
Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
210	Chain	Railway Multiple		Cross ties at 90° to the line and centred on the line
22	Chain	Foot Track		
22	Polygon	Foreshore Flat Sand Area		Colour: <b>C</b> 0% <b>M</b> 59% <b>Y</b> 100% <b>K</b> 18% Pattern: Equivalent to Screen Random Dot 1
222	Point	Railway station		Hot spot at the centre of the circle
23	Polygon	Saline Coastal Flat Salt Evaporator Settling Pond Aquaculture Area		Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10% Screen: Equivalent to Screen Random Dot 1
24	Polygon	Recreation Area ( <b>Feature class</b> )		Colour: <b>C</b> 80% <b>M</b> 0% <b>Y</b> 69% <b>K</b> 0%
242	Chain	Secondary Road (WAC Only)		Colour: <b>C</b> 0% <b>M</b> 100% <b>Y</b> 100% <b>K</b> 0%
243	Chain	Other Road (WAC Only)		Colour: <b>C</b> 0% <b>M</b> 100% <b>Y</b> 100% <b>K</b> 0%
245	Chain	Railway Causeway Road Causeway		
25	Point	Grid (Stock Grid)		Hot spot at centre of square Orientation 0
25	Polygon	Sand Dune		Colour: <b>C</b> 0% <b>M</b> 59% <b>Y</b> 100% <b>K</b> 18% Pattern: Equivalent to Screen Sand Dunes 1
250	Chain	Road Dual carriageway		
251	Chain	Road Principal sealed		Colour: <b>C</b> 0% <b>M</b> 100% <b>Y</b> 100% <b>K</b> 0%
252	Chain	Road Under construction		Colour: <b>C</b> 0% <b>M</b> 100% <b>Y</b> 100% <b>K</b> 0%
253	Chain	Road Minor unsealed		Colour: <b>C</b> 0% <b>M</b> 100% <b>Y</b> 100% <b>K</b> 0%

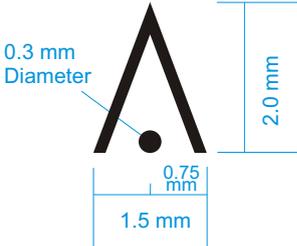
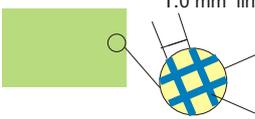
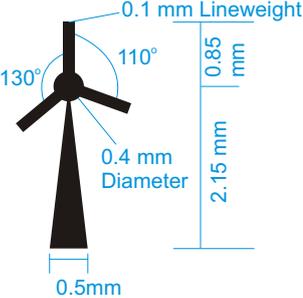
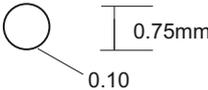
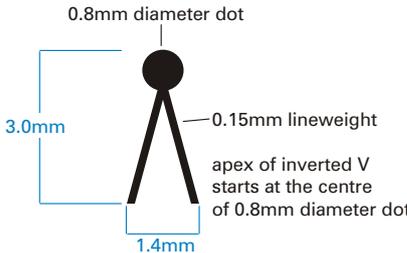
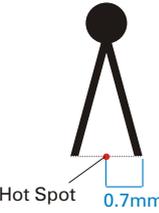
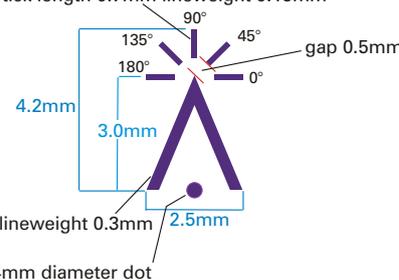
Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
254	Chain	Road Vehicular track		Colour: <b>C 0% M 100% Y 100% K 0%</b>
255	Chain	Arrow (With Arrow)		
256	Chain	Road Secondary sealed		Colour: <b>C 0% M 100% Y 100% K 0%</b>
257	Chain	Road Minor sealed  Road Principal (WAC Only)		Colour: <b>C 0% M 100% Y 100% K 0%</b>
258	Chain	Road Principal unsealed		Colour: <b>C 0% M 100% Y 100% K 0%</b>
259	Chain	Road Secondary unsealed		Colour: <b>C 0% M 100% Y 100% K 0%</b>
26	Point	Gate		Hot spot  Orientation 90
26	Polygon	Building Area Building type: operational		Road  Fence line
260	Chain	Railway Bridge Line Road Bridge Line		Digital feature 
260	Point	Railway Bridge Point Road Bridge Point		Hot spot  Orientation 0
265	Chain	Pointer		
266	Chain	Railway Overpass	0.2mm space on either side of inner rail symbol will mask all rail and road features which cross its path (measurement to be taken from edge of rail line symbol)	 Linewidth of the rail symbol (feat_wid).

Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
267	Chain	Road Overpass	0.2mm space on either side of inner road symbol will mask all rail and road features which cross its path (measurement to be taken from edge of road line symbol)	
268	Chain	Foot Bridge		Digital feature 
27	Point	Road Marker National		Route Number in black as annotation feature Hot spot 
271	Point	Road Marker National (Oversize)		Route Number in black as annotation feature Hot spot 
28	Point	Road Marker State		Hot spot  Route Number in black as annotation feature Outline Colour: Solid Black Infill Colour: C 20% M 0% Y 0% K 0%
281	Point	Road Marker State (Oversize)		Hot spot  Route Number in black as annotation feature Outline Colour: Solid Black Infill Colour: C 20% M 0% Y 0% K 0%
281	Chain	Pipeline above ground & elevated( not water)		
282	Chain	Pipeline underground (not water)		
290	Point	Transition Point On roads and railways	0.15mm line, 180° arc 	Hot spot  Orientation 0 Tunnel  Road or railway 
30	Chain	Aerial Cableway		
31	Chain	Embankment		Feature in database Start node  End node
33	Chain	Sand Ridge		Colour: C 0% M 35% Y 60% K 11%
4	Polygon	Rainforest		Shade Colour: C 15% M 0% Y 43% K 0% with Line Colour: C 100% M 0% Y 86% K 0%

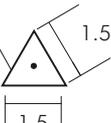
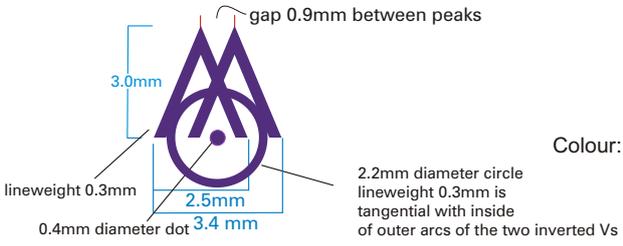
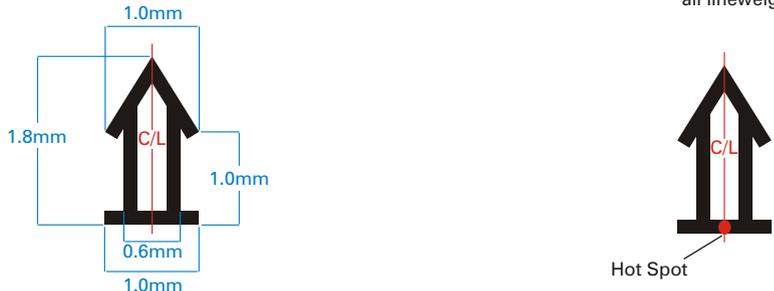
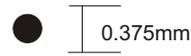
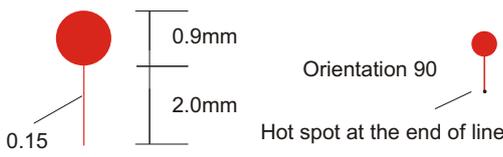
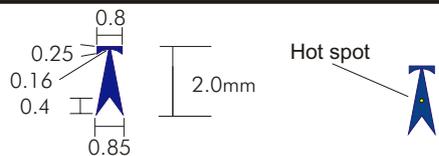
Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
40	Point	Homestead & Building Point (Significant)		Hot spot at the centre of the square
401	Point	Ambulance Station (Emergency Mapping)		Colour: <b>C</b> 100% <b>M</b> 0% <b>Y</b> 100% <b>K</b> 0% 'A' is a Zurich Extra Bold 10pt in solid white Centred both vertically and horizontally
404	Point	Fire Station (Emergency Mapping)		Colour: <b>C</b> 0% <b>M</b> 100% <b>Y</b> 100% <b>K</b> 0% 'F' is a Zurich Extra Bold 10pt in solid white Centred both vertically and horizontally
406	Point	Police Station (Emergency Mapping)		Colour: <b>C</b> 95% <b>M</b> 52% <b>Y</b> 0% <b>K</b> 0% Each solid blue square is a 1mmX1mm area
41	Point	Building Point (ruin)		Hot spot at the centre of the square
42	Chain	Lock Line & Arrow (without arrow)		Length as required
				River Point of Lock faces upstream
420	Point	Populated Place & Place Name		Hot spot at the centre of the circle Red circle: Colour: <b>C</b> 0% <b>M</b> 100% <b>Y</b> 100% <b>K</b> 0% Yellow fill: Colour: <b>C</b> 0% <b>M</b> 0% <b>Y</b> 100% <b>K</b> 0%
420	Polygon	Built Up Area		Colour: <b>C</b> 0% <b>M</b> 29% <b>Y</b> 30% <b>K</b> 0%
421	Point	Village or Settlement < 500 people (Wac Only)		Hot spot at the centre of the circle Outline Colour: Solid Black Yellow fill: Colour: <b>C</b> 0% <b>M</b> 0% <b>Y</b> 100% <b>K</b> 0%
422	Point	Village or Settlement 500 - 1000 people (Wac Only)		Hot spot at the centre of the circle Outline Colour: Solid Black Yellow fill: Colour: <b>C</b> 0% <b>M</b> 0% <b>Y</b> 100% <b>K</b> 0%
423	Point	Town 1001 - 2000 people (Wac Only)		Hot spot at the centre of the circle Outline Colour: Solid Black Yellow fill: Colour: <b>C</b> 0% <b>M</b> 0% <b>Y</b> 100% <b>K</b> 0%
424	Point	Town 2001 - 5000 people (Wac Only)		Hot spot at the centre of the circle Outline Colour: Solid Black Yellow fill: Colour: <b>C</b> 0% <b>M</b> 0% <b>Y</b> 100% <b>K</b> 0%
425	Polygon	Builtup area > 5000 people (WAC ONLY)		Colour: <b>C</b> 0% <b>M</b> 0% <b>Y</b> 100% <b>K</b> 0%

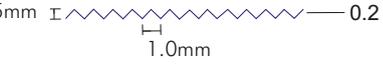
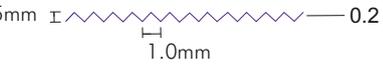
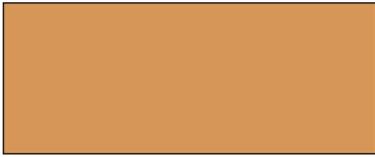
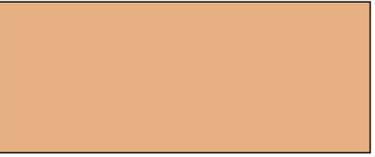
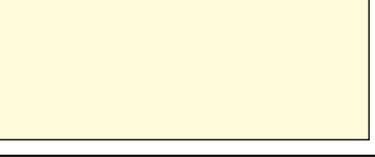
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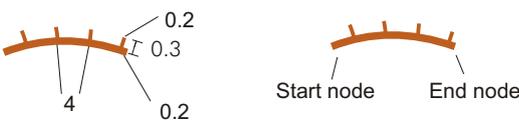
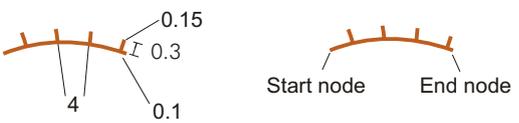
429	Point	Building Building Function: Grain Storage  (WAC ONLY)	  <p>all lineweights 0.15mm</p>
430	Point	Building Point (Operational & Abandoned Homestead)	 <p>Hot spot at the centre of the square</p>
433	Point	Yard	 <p>Hot spot at the centre of square</p>
434	Point	Windpump	 <p>Hot spot</p>
45	Chain	Dam Wall (coincident with road)	
451	Point	Cemetery Point	 <p>Hot spot at the centre of the circle</p>
497	Point	Vertical Obstruction (chimney)	 <p>Hot Spot</p>
498	Point	Vertical Obstruction (silo)	 <p>Hot Spot</p>

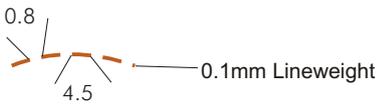
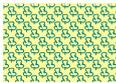
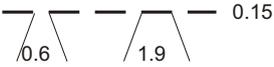
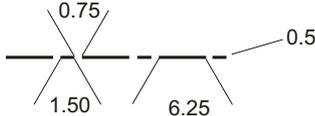
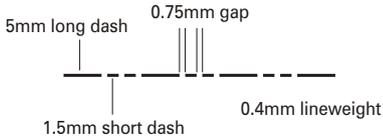
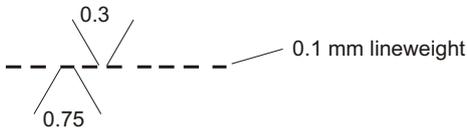
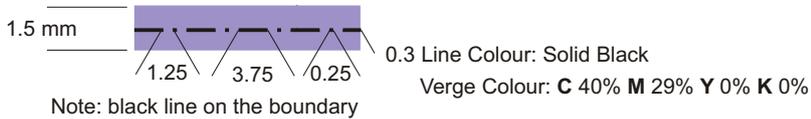
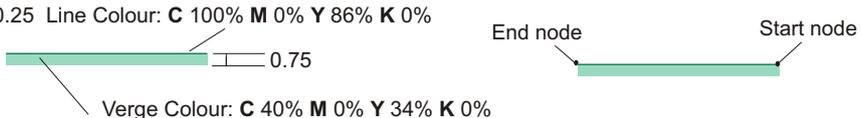
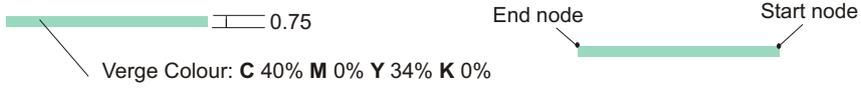
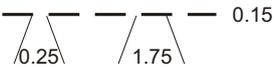
Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
499	Point	Vertical Obstruction (tower)		
5	Polygon	Orchard		<p>Colour: <b>C</b> 0% <b>M</b> 0% <b>Y</b> 40% <b>K</b> 0% with 0.05mm lines at 45 degrees Colour: <b>C</b>100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%</p>
50	Point	Bench Mark		Hot spot at the centre of the circle
500	Point	Vertical Obstruction (wind turbine generator)		
501	Point	Vertical Obstruction (other)		Hot spot at the centre of the circle
502	Point	Microwave Repeater Station (WAC ONLY)		
503	Point	Obstacle (singular) Lit (WAC ONLY)		<p>Hot Spot at centre of dot Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%</p>

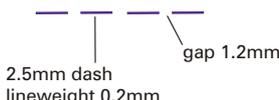
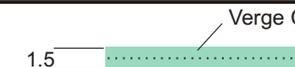
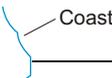
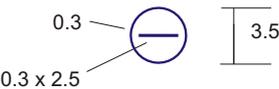
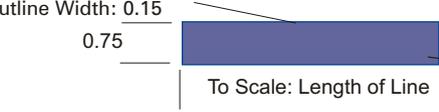
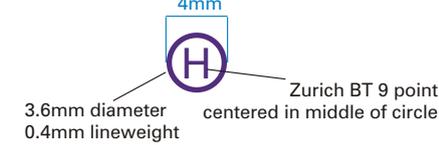
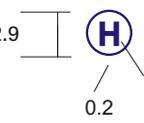
Symbol Number	Point Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
504	Point	Obstacle (group) <i>Lit</i> (WAC ONLY)	<p>tick length 0.7mm line weight 0.15mm 90° 90° gap 0.9mm between peaks 135° 45° gap 0.5mm 180° 0° 4.2mm 3.0mm line weight 0.3mm 2.5mm 0.4mm diameter dot 3.4 mm</p>	Hot Spot at centre of dot Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%
505	Point	Obstacle (singular) <i>Unlit</i> (WAC ONLY)	<p>3.0mm line weight 0.3mm 2.5mm 0.4mm diameter dot C/L 3.4 mm</p>	Hot Spot at centre of dot Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%
506	Point	Obstacle (group) <i>Unlit</i> (WAC ONLY)	<p>gap 0.9mm between peaks 3.0mm 2.5mm 0.4mm diameter dot 3.4 mm</p>	Hot Spot at centre of dot Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%
507	Point	Broadcasting Station (singular) <i>Radio or Television with Mast Lit</i> (WAC ONLY)	<p>tick length 0.7mm line weight 0.15mm 90° 90° gap 0.5mm 135° 45° gap 0.5mm 180° 0° 4.2mm 3.0mm line weight 0.3mm 3.6mm 0.4mm diameter dot C/L 2.0mm diameter circle line weight 0.3mm is tangential with inside of inverted V 3.4 mm</p>	Hot Spot at centre of dot Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%
508	Point	Broadcasting Station (group) <i>Radio or Television with Mast Lit</i> (WAC ONLY)	<p>tick length 0.7mm line weight 0.15mm 90° 90° gap 0.9mm between peaks 135° 45° gap 0.5mm 180° 0° 4.2mm 3.0mm line weight 0.3mm 2.5mm 0.4mm diameter dot 3.4 mm 2.2mm diameter circle line weight 0.3mm is tangential with inside of outer arcs of the two inverted Vs</p>	Hot Spot at centre of dot Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%
509	Point	Broadcasting Station (singular) <i>Radio or Television with Mast Unlit</i> (WAC ONLY)	<p>line weight 0.3mm 3.0mm 3.6mm 0.4mm diameter dot C/L 2.0mm diameter circle line weight 0.3mm is tangential with inside of inverted V 3.4 mm</p>	Hot Spot at centre of dot Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%

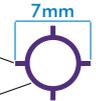
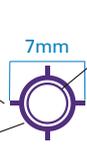
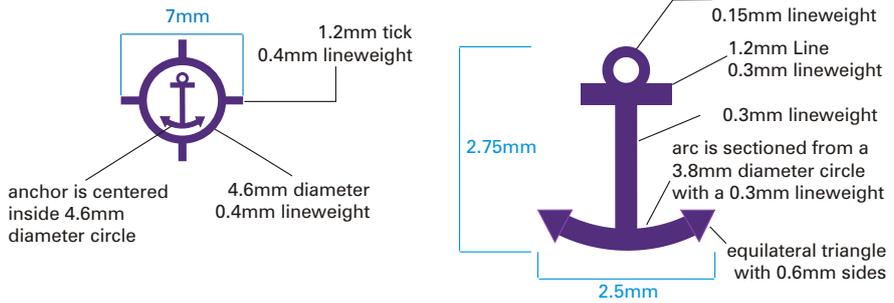
Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
51	Point	Horizontal Control Point	0.15 line and dot diameter 	Hot spot at the centre of the dot within the triangle
510	Point	Broadcasting Station (group) Radio or Television with Mast Unlit (WAC ONLY)	gap 0.9mm between peaks 3.0mm lineweight 0.3mm 2.5mm 0.4mm diameter dot 3.4 mm 2.2mm diameter circle lineweight 0.3mm is tangential with inside of outer arcs of the two inverted Vs 	Hot Spot at centre of dot Colour: C 79% M 90% Y 0% K 0%
511	Point	Broadcasting Station Radio or Television without Mast Air Navigation Beacon without obstruction or aerodrome (WAC ONLY)	2.5mm 0.4mm diameter dot 2.2mm diameter lineweight 0.3mm 	Hot Spot at centre of dot Colour: C 79% M 90% Y 0% K 0%
512	Point	WAC Bounding Box & Lead Line	0.20mm 	Colour: C 79% M 90% Y 0% K 0% See Page 19 for more Details
513	Point	Grain Silo (WAC ONLY)	all lineweights 0.15mm 1.0mm 1.8mm C/L 1.0mm 0.6mm 1.0mm 	Hot Spot
52	Point	Spot Elevation Mountain Place Name & Spot Elevation (Other elevation (WAC Only))	0.375mm 	Hot spot at the centre of the circle
520	Point	Spot Elevation Maximum (WAC Only)	0.7mm 	Hot spot at the centre of the circle
54	Point	Distance Indicator	0.9mm 2.0mm Orientation 90 Hot spot at the end of line 0.15 	Colour: C 0% M 100% Y 100% K 0%
540	Point	Powerline Pylon	0.8 0.25 0.16 0.4 0.85 2.0mm Hot spot 	Colour: C 100% M 73% Y 0% K 0%

Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
541	Chain	Powerline (superseded)	 0.15	Colour: <b>C</b> 100% <b>M</b> 73% <b>Y</b> 0% <b>K</b> 0%
542	Chain	Powerline	0.5mm  0.2	Colour: <b>C</b> 100% <b>M</b> 73% <b>Y</b> 0% <b>K</b> 0%
543	Chain	Powerline (WAC Only)	0.5mm  0.2	Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%
55	Chain	Standard Contour (Index)	 0.2	Colour: <b>C</b> 0% <b>M</b> 59% <b>Y</b> 100% <b>K</b> 18%
553	Polygon	Hypsometric Tint  Elevation : 2000m (6560ft) + (WAC Only)		Colour: <b>C</b> 0% <b>M</b> 35% <b>Y</b> 70% <b>K</b> 10%
554	Polygon	Hypsometric Tint  Elevation : 1500m (4920ft) - 2000m (6560ft) (WAC Only)		Colour: <b>C</b> 0% <b>M</b> 25% <b>Y</b> 45% <b>K</b> 5%
555	Polygon	Hypsometric Tint  Elevation : 1000m (3280ft) - 1500m (4920ft) (WAC Only)		Colour: <b>C</b> 0% <b>M</b> 11% <b>Y</b> 25% <b>K</b> 5%
556	Polygon	Hypsometric Tint  Elevation : 500m (1640ft) - 1000m (3280ft) (WAC Only)		Colour: <b>C</b> 0% <b>M</b> 5% <b>Y</b> 20% <b>K</b> 3%
557	Polygon	Hypsometric Tint  Elevation : 200m (660ft) - 500m (1640ft) (WAC Only)		Colour: <b>C</b> 0% <b>M</b> 0% <b>Y</b> 12% <b>K</b> 0%
558	Polygon	Hypsometric Tint  Elevation : 0m (0ft) - 200m (660ft) (WAC Only)		Colour: <b>C</b> 10% <b>M</b> 0% <b>Y</b> 5% <b>K</b> 3%
559	Polygon	Hypsometric Tint  Elevation : Below 0m (Below 0ft) (WAC Only)		Colour: <b>C</b> 5% <b>M</b> 0% <b>Y</b> 7% <b>K</b> 15%

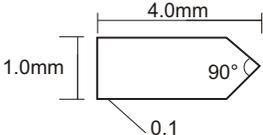
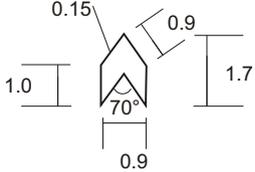
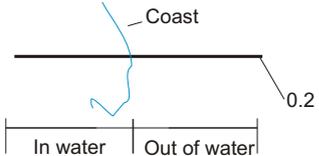
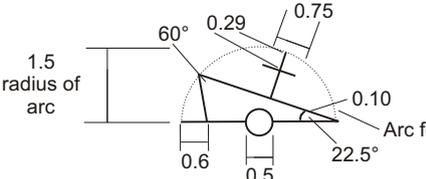
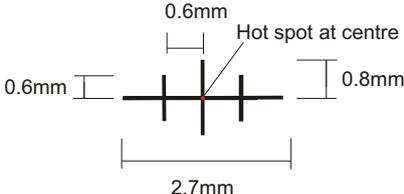
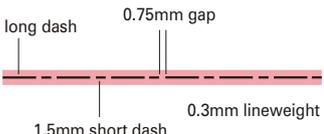
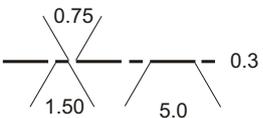
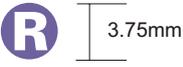
Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
56	Chain	Standard Contour (Not index)		Colour: <b>C</b> 0% <b>M</b> 59% <b>Y</b> 100% <b>K</b> 18%
561	Polygon	Bathymetric Tint Depth: 0m (0ft) - 100m (330ft), 100m (330ft) - 200m (660ft) (WAC Only)		Colour: <b>C</b> 10% <b>M</b> 0% <b>Y</b> 0% <b>K</b> 0%
562	Polygon	Bathymetric Tint Depth: 200m (660ft) - 500m (1640ft) (WAC Only)		Colour: <b>C</b> 20% <b>M</b> 0% <b>Y</b> 0% <b>K</b> 0%
563	Polygon	Bathymetric Tint Depth: 500m (1640ft) - 1000m (3280ft) (WAC Only)		Colour: <b>C</b> 30% <b>M</b> 0% <b>Y</b> 0% <b>K</b> 0%
564	Polygon	Bathymetric Tint Depth: 1000m (3280ft) - 3000m (9840ft) (WAC Only)		Colour: <b>C</b> 40% <b>M</b> 5% <b>Y</b> 0% <b>K</b> 5%
565	Polygon	Bathymetric Tint Depth: 3000m + (WAC Only)		Colour: <b>C</b> 55% <b>M</b> 5% <b>Y</b> 0% <b>K</b> 5%
57	Chain	Depression Contour (Index)		Colour: <b>C</b> 0% <b>M</b> 59% <b>Y</b> 100% <b>K</b> 18%
573	Chain	Grid line Standard  Bathymetric Line Standard		Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%
574	Chain	Grid line 100 000 m @ 250K 10 000m @ 100K		Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%
575	Chain	Graticule line  Dam or Weir (Wac Only)		
58	Chain	Depression Contour (Standard)		Colour: <b>C</b> 0% <b>M</b> 59% <b>Y</b> 100% <b>K</b> 18%

Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
59	Chain	Auxiliary Contour		Colour: <b>C</b> 0% <b>M</b> 59% <b>Y</b> 100% <b>K</b> 18%
6	Polygon	Plantation <i>All features at 250K &amp; Softwood (100K only)</i>		Colour: <b>C</b> 0% <b>M</b> 0% <b>Y</b> 40% <b>K</b> 0% With Pattern: equivalent to Screen MP-2 Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%
60	Chain	Habitation Boundaries & Cultural Boundaries		0.15
600	Polygon	Plantation <i>Hardwood (100K only)</i>		Colour: <b>C</b> 0% <b>M</b> 0% <b>Y</b> 40% <b>K</b> 0% With Pattern: equivalent to Screen Hardwood Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%
601	Chain	Open Grass Plain Boundary (WAC ONLY)		0.15
62	Chain	International Boundary		0.5
620	Chain	Boundary - International (WAC ONLY)		0.4mm lineweight
63	Chain	Landmark Area (edge symbology)		0.1 mm lineweight
64	Chain	Prohibited Area Boundary Line <i>Single boundary</i>		0.3 Line Colour: Solid Black Verge Colour: <b>C</b> 40% <b>M</b> 29% <b>Y</b> 0% <b>K</b> 0%
641	Chain	Prohibited Area Boundary Line <i>Dual boundary</i>		0.3 Line Colour: Solid Black Verge Colour: <b>C</b> 40% <b>M</b> 29% <b>Y</b> 0% <b>K</b> 0%
65	Chain	Reserve Boundary Line <i>Single boundary</i>		0.25 Line Colour: <b>C</b> 100% <b>M</b> 0% <b>Y</b> 86% <b>K</b> 0% Verge Colour: <b>C</b> 40% <b>M</b> 0% <b>Y</b> 34% <b>K</b> 0%
650	Chain	Reserve Boundary Line <i>Single boundary (no spline)</i>		0.25 Line Colour: <b>C</b> 100% <b>M</b> 0% <b>Y</b> 86% <b>K</b> 0% Verge Colour: <b>C</b> 40% <b>M</b> 0% <b>Y</b> 34% <b>K</b> 0%
66	Chain	Tropic of Capricorn		0.15

Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
660	Chain	Isogonal Line	 2.5mm dash lineweight 0.2mm gap 1.2mm	Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%
68	Chain	Reserve Boundary Line <i>Dual boundary not coincident with a symbolised feature</i>	 1.5 0.25 Verge Colour: <b>C</b> 40% <b>M</b> 0% <b>Y</b> 34% <b>K</b> 0% Line Colour: <b>C</b> 100% <b>M</b> 0% <b>Y</b> 86% <b>K</b> 0%	Note: solid green line on the boundary
680	Chain	Reserve Boundary Line <i>Dual boundary coincident with edge of perennial feature or sea.</i>	 1.5 0.25 Verge Colour: <b>C</b> 40% <b>M</b> 0% <b>Y</b> 34% <b>K</b> 0% Verge centred on linework	Note: solid green line on the boundary
681	Chain	Reserve Boundary Line <i>Dual boundary coincident with a symbolised feature</i>	 0.75 0.25 Verge Colour: <b>C</b> 40% <b>M</b> 0% <b>Y</b> 34% <b>K</b> 0% Line Colour: <b>C</b> 100% <b>M</b> 0% <b>Y</b> 86% <b>K</b> 0% Half width of symbolised feature plus 0.15mm	Note: solid green line on the boundary
7	Polygon	Mangrove		Colour: <b>C</b> 45% <b>M</b> 5% <b>Y</b> 40% <b>K</b> 5%
70	Chain	Jetty	 Coast 0.3 x length to scale	
700	Polygon	Aircraft Facility Area <i>Airport</i>		Colour: <b>C</b> 30% <b>M</b> 22% <b>Y</b> 0% <b>K</b> 0%
701	Point	Aircraft Facility Point <i>Airport</i>	 0.4 5.8	Colour: <b>C</b> 100% <b>M</b> 73% <b>Y</b> 0% <b>K</b> 0% Hot spot at the centre of the circle
702	Chain	Aircraft Facility Line	 0.15	Colour: <b>C</b> 100% <b>M</b> 73% <b>Y</b> 0% <b>K</b> 0%
703	Point	Aircraft Facility Point <i>Landing ground</i>	 0.3 0.3 x 2.5 3.5	Hot spot at the centre of the circle Orientation 0. Colour: <b>C</b> 100% <b>M</b> 73% <b>Y</b> 0% <b>K</b> 0%
703	Chain	Aircraft Facility Line <i>Landing ground</i>	 0.75 0.15 To Scale: Length of Line Infill Colour: <b>C</b> 30% <b>M</b> 22% <b>Y</b> 0% <b>K</b> 0%	Outline Colour: <b>C</b> 100% <b>M</b> 73% <b>Y</b> 0% <b>K</b> 0% Outline Width: 0.15 Symbol Centred along the line feature
704	Point <i>(WAC ONLY)</i>	Helicopter Landing Site	 4mm 3.6mm diameter 0.4mm lineweight Zurich BT 9 point centered in middle of circle	Hot spot at centre of the circle Orientation 0 Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%
706	Chain	Runway Centreline	 0.4mm	Colour: <b>C</b> 100% <b>M</b> 73% <b>Y</b> 0% <b>K</b> 0%
708	Point	Aircraft Facility Point <i>Heliport</i>	 2.9 0.2	Hot spot at the centre of the circle Orientation 0 Colour: <b>C</b> 100% <b>M</b> 73% <b>Y</b> 0% <b>K</b> 0%

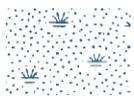
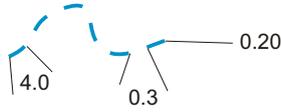
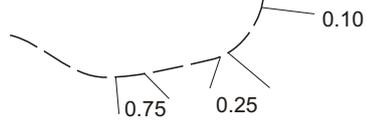
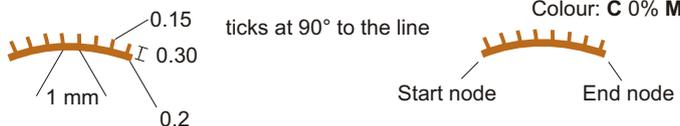
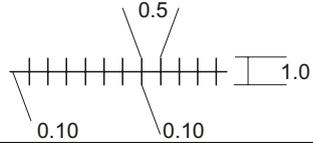
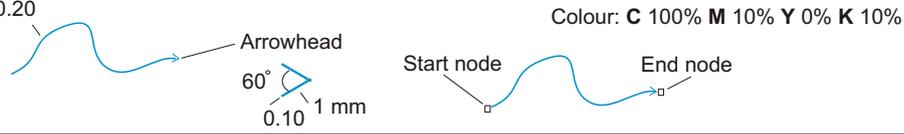
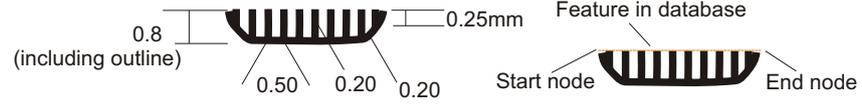
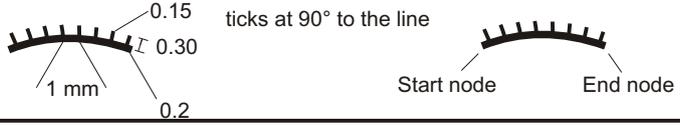
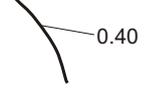
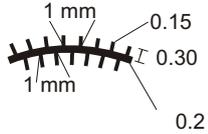
Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
709	Chain	Taxiway	 0.30	Colour: <b>C</b> 100% <b>M</b> 73% <b>Y</b> 0% <b>K</b> 0%
71	Chain	Sea Wall	 0.30	
710	Point (WAC ONLY)	Aerodrome Civilian Unlicensed	 3.6mm diameter 0.4mm line weight 4 mm gap 0.7mm at 45° to center of circle	Hot spot at centre of circle Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%
711	Point (WAC ONLY)	Aerodrome Civilian Unusable	 3.6mm diameter 0.4mm line weight 4 mm Zurich BT 9 point centered in middle of circle	Hot spot at centre of circle Orientation 0 Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%
712	Point (WAC ONLY)	Aerodrome Licensed Civilian with Passenger Facilities	 1.2mm tick 0.4mm line weight 7mm 4.6mm diameter 0.4mm line weight	Hot spot at centre of circle Orientation 0 Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%
713	Point (WAC ONLY)	Aerodrome Licensed Civilian without Passenger Facilities	 3.6mm diameter 0.4mm line weight 4 mm	Hot spot at centre of circle Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%
714	Line (WAC ONLY)	Customs Aerodrome Pecked Line	 Lineweight 0.2mm gap 0.6mm dash length 2.5mm	Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%
716	Point (WAC ONLY)	Aerodrome Licensed Joint Civilian and Military	 1.2mm tick 0.4mm line weight 7mm 3.7mm diameter 0.15mm line weight 4.6mm diameter 0.4mm line weight	Hot spot at centre of circle Orientation 0 Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%
717	Point (WAC ONLY)	Aerodrome Licensed Military	 5mm 4.6mm diameter 0.4mm line weight 3.7mm diameter 0.15mm line weight	Hot spot at centre of circle Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%
718	Point (WAC ONLY)	Aerodrome Water Civilian Licensed with Passenger Facilities	 7mm 1.2mm tick 0.4mm line weight 2.75mm 2.5mm anchor is centered inside 4.6mm diameter circle 4.6mm diameter 0.4mm line weight 0.4mm diameter 0.15mm line weight 1.2mm Line 0.3mm line weight 0.3mm line weight arc is sectioned from a 3.8mm diameter circle with a 0.3mm line weight equilateral triangle with 0.6mm sides	Hot spot at centre of circle Orientation 0 Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%

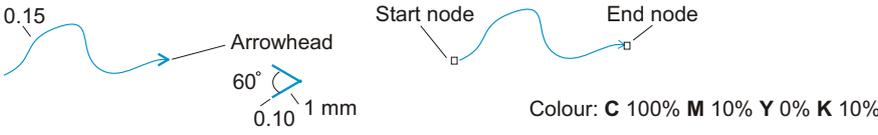
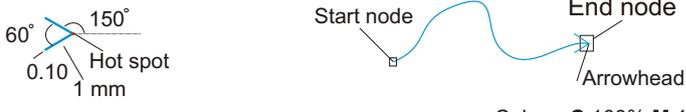
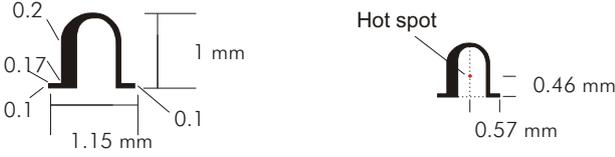
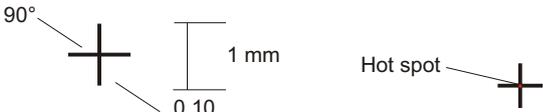
Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
719	Point (WAC ONLY)	Aerodrome  Water Joint Civilian and Military	<p>Hot spot at centre of circle Orientation 0 Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%</p> <p>0.4mm diameter 0.15mm line weight 1.2mm Line 0.3mm line weight 0.3mm line weight arc is sectioned from a 3.8mm diameter circle with a 0.3mm line weight equilateral triangle with 0.6mm sides</p> <p>7mm 1.2mm tick 0.4mm line weight 4.6mm diameter 0.4mm line weight 3.7mm diameter 0.15mm line weight anchor is centered inside 3.7mm diameter circle 2.75mm 2.5mm</p>	
72	Point	Lighthouse	<p>Hot spot at the centre of the circle</p> <p>1.5 0.75</p>	
720	Point (WAC ONLY)	Aerodrome  Water Licensed Military	<p>Hot spot at centre of circle Orientation 0 Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%</p> <p>0.4mm diameter 0.15mm line weight 1.2mm Line 0.3mm line weight 0.3mm line weight arc is sectioned from a 3.8mm diameter circle with a 0.3mm line weight equilateral triangle with 0.6mm sides</p> <p>5mm 4.6mm diameter 0.4mm line weight 3.7mm diameter 0.15mm line weight anchor is centered inside 3.7mm diameter circle 2.75mm 2.5mm</p>	
722	Point (WAC ONLY)	Air Navigation Light	<p>Hot spot at centre of star Orientation 0 Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%</p> <p>2.8mm</p>	
728	Point (WAC ONLY)	Marine Light	<p>Hot Spot at centre of dot Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%</p> <p>1.4mm diameter dot</p>	
729	Point (WAC ONLY)	Marine Lightship	<p>Hot Spot at centre of circle Orientation 0 Colour: <b>C</b> 79% <b>M</b> 90% <b>Y</b> 0% <b>K</b> 0%</p> <p>1.4mm 6 pointed star line weight 0.2mm 3.5mm 1.0mm 2.4mm 3.6mm 0.8mm diameter circle line weight 0.2mm</p>	
73	Point	Spring	<p>Hot spot at the centre of the circle Orientation 0 Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%</p> <p>0.15 0.75mm 1.5mm</p>	
751	Chain	Breakwater	<p>0.3</p>	

Symbol Number	Symbol Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
752	Chain	Wharf Line		
753	Point	Dry Dock Point		Hot spot Orientation 0
754	Point	Lock		Hot spot Orientation 90 River Point faces upstream
755	Chain	Boat Ramp Line		
756	Point	Wreck Bare or Tidal		Hot spot at centre of circle at base of symbol Arc for measurement only, not part of symbol
759	Point	Wreck Submerged		Hot spot at centre of symbol 0.10 mm lineweight
79	Chain	Boundary - State or Territory (WAC ONLY)		Verge Colour: <b>C 0% M 35% Y 15% K 0%</b> Line Colour: Solid Black 2.0mm verge
80	Chain	State Border		
801	Point	Storage Tank		Hot spot at centre of circle
802	Point	Rescue Point (Emergency Mapping)		Colour: <b>C 60% M 60% Y 0% K 0%</b> 'R' is a Zurich Extra Bold 10pt in solid white Centred both vertically and horizontally

Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
803	Point	Signage (Emergency Mapping)	<p>Hot spot at centre of base of symbol</p> <p>Red Dimension Markers are not part of symbol</p> <p>Colour: <b>C</b> 0% <b>M</b> 0% <b>Y</b> 0% <b>K</b> 100%</p> <p>Note: Billboard portion will be white not transparent.</p>	
804	Point	Communication Device (Emergency Mapping)	<p>Hot spot at centre of symbol</p> <p>Red Dimension Markers are not part of symbol</p> <p>Colour: <b>C</b> 0% <b>M</b> 0% <b>Y</b> 0% <b>K</b> 100%</p> <p>Note: Handset portion will be white not transparent.</p>	
81	Point	Waterhole	<p>Hot spot at centre of circle</p> <p>Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%</p>	
82	Point	Waterpoint & Water Access (Emergency Mapping)	<p>Hot spot at centre of circle</p> <p>Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%</p>	
84	Point	Pinnacle	<p>Hot spot at the centre of the circle</p>	
86	Point	Water Tank	<p>Hot spot at centre of square</p> <p>Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%</p>	
87	Chain	Windbreak	<p>Colour: <b>C</b> 100% <b>M</b> 0% <b>Y</b> 86% <b>K</b> 0%</p>	

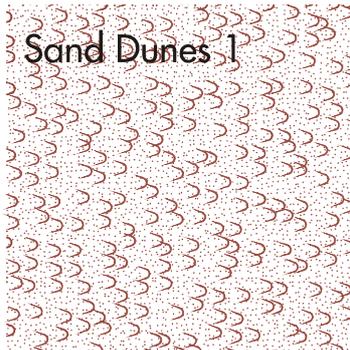
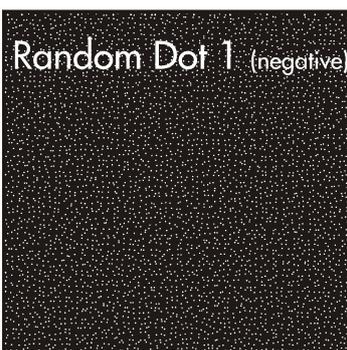
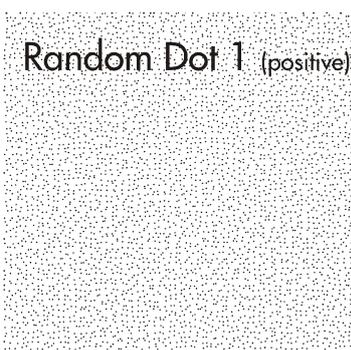
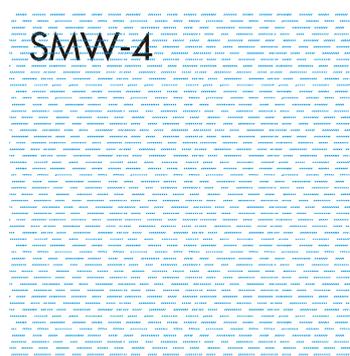
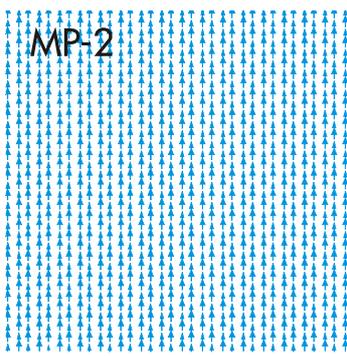
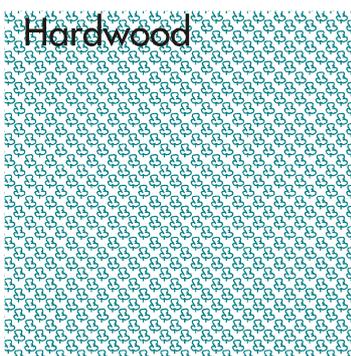
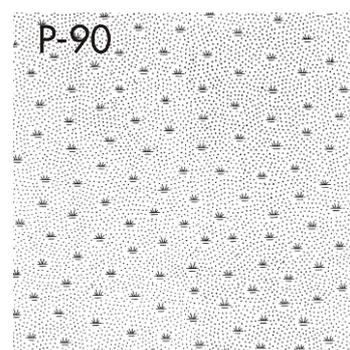
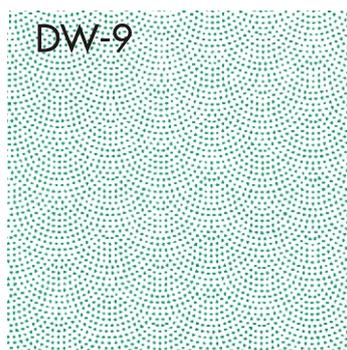
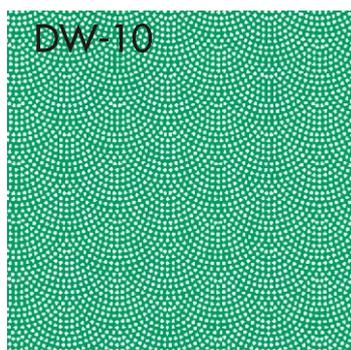
Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
881	Chain	Rapid Line On major watercourse chain		
881	Polygon	Rapid Area On perennial watercourse polygon		Colour: <b>C</b> 20% <b>M</b> 0% <b>Y</b> 0% <b>K</b> 0% Pattern: equivalent to Screen Random Dot 1 (negative screen)
882	Chain	Rapid Line On minor watercourse chain		
89	Point	Waterfall		Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10% Hot spot at centre of line Orientation 0 Waterline Watercourse or connector
90	Chain	Physiography Boundaries Bounding a crater & distorted surface		0.15
90	Polygon	Distorted Surface Outcrop		Colour: <b>C</b> 0% <b>M</b> 9% <b>Y</b> 15% <b>K</b> 3%
904	Chain	Black Soil Plain Bounding Line		0.25
904	Polygon	Black Soil Plain		Colour: <b>C</b> 0% <b>M</b> 0% <b>Y</b> 20% <b>K</b> 0%

Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
908	Polygon	Swamp Marine Swamp		Pattern: Equivalent of Screen P-90 Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10% At least one grass symbol is to fall in each polygon
91	Chain	Watercourse Hierarchy: Major (100K use only for Non-perennial features)		Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%
912	Chain	Physiography Boundaries Bounding Rocky outcrops		
92	Chain	Watercourse Hierarchy: Major (250K no flow arrow & 100K use only for Perennial features)		Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%
920	Chain	Cliff (WAC Only)		Colour: <b>C</b> 0% <b>M</b> 59% <b>Y</b> 100% <b>K</b> 18%
921	Chain	Levee		cross ticks at 90° to the line and centre on the line
922	Chain	Watercourse Hierarchy: Major with direction of flow		Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%
923	Chain	Cutting		Feature in database
924	Chain	Cliff		ticks at 90° to the line
925	Chain	Dam Wall		
926	Chain	Spillway		Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%
927	Chain	Fence		
929	Chain	Razorback		ticks at 90° to the line

Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
93	Chain	Old Lake Bed Boundary		Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%
94	Chain	Waterbody Boundaries & Shoreline		Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%
940	Chain	Watercourse Hierarchy: Minor (250K no flow arrow & 100K used for Perennial features only.)		Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%
942	Chain	Watercourse Hierarchy: Minor with direction of flow		Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%
944	Chain	Watercourse Hierarchy: Minor (100K use only for Non-perennial features)		Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%
948	Point	Flow Direction Arrow		Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%
947	Chain	Canal and Pipeline Water		Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%
95	Chain	Shoal (edge symbology)		Colour: <b>C</b> 100% <b>M</b> 10% <b>Y</b> 0% <b>K</b> 10%
96	Point	Cave		
97	Polygon	Reef		Colour: <b>C</b> 50% <b>M</b> 5% <b>Y</b> 0% <b>K</b> 5%
98	Point	Offshore Rock Bare and/or Tidal		
980	Point	Offshore Rock Submerged		
99	Chain	Cleared line		

## Screens

The following representations of the screens were embedded in this document as a WMF graphic, a clearer view of these may occur through increasing the zoom factor of the document. They are supplied as an indication of the screen only, film or eps copies must be used when building the symbol libraries.



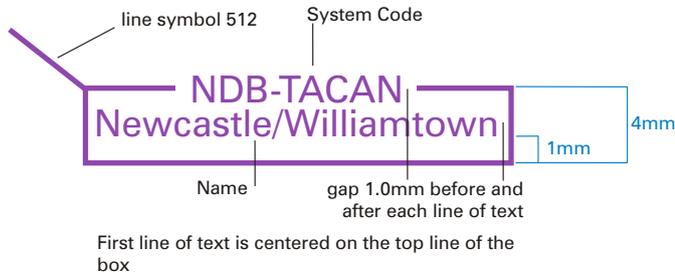
# LEAD LINES AND TEXT BOXES

For 1:1 million production of World Aeronautical Charts (WACs) and their associated base data, lead lines and text boxes are required for certain associated text of the features Air Navigation Beacon, Broadcasting Station and Aerodrome used for Customs purposes.

The construction of the text boxes vary according to the feature and are detailed below making use of the symbol 512 and 714 documented in the symbol dictionary. The text font and size are as per the type specifications and are only shown in the diagrams to assist comprehension.

In all cases the text is centred in the box. The length of all boxes will vary depending on the length of the text. The length of lead lines may vary according to requirements.

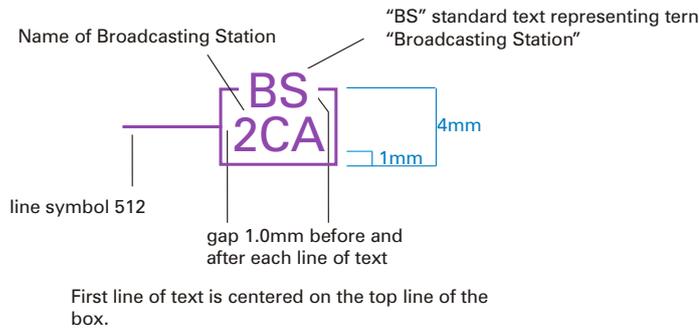
## AIR NAVIGATION BEACON



Examples



## BROADCASTING STATION (radio or television)



Examples



## CUSTOMS AERODROME



Examples



## LEAD LINE ORIENTATION

Lead lines should be placed to avoid conflict or confusion with the associated symbol. For example it is not recommended that when using Lead Lines from a customs aerodrome which are licenced with passenger facilities that the lead line be placed so that its orientation is directly north, south, west or east even though these are normally the preferred directions.

It is acceptable but not preferable to have changes in direction within lead lines.

Lead lines should connect in preference order to one of the 8 locations shown below wherever possible. Position of the text box and subsequently the lead line will be based on text placement principles.

