

**5—FOLDS**

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
<b>5.1—Anticlines</b>				
5.1.1	Anticline (1st option)—Identity and existence certain, location accurate			<p>Place fold trace where axial surface of anticline intersects the ground surface.</p> <p>Place arrows at places along fold trace to indicate overall fold type (anticline); do not place at specific locality where observation was made.</p> <p>Arrowheads may be added to show direction of plunge (see Section 5.10).</p> <p>Open-armed ("2nd option") symbols may be used to show a second generation or another instance of a particular fold type. May also be shown in black or other colors.</p>
5.1.2	Anticline (1st option)—Identity or existence questionable, location accurate			
5.1.3	Anticline (1st option)—Identity and existence certain, location approximate			
5.1.4	Anticline (1st option)—Identity or existence questionable, location approximate			
5.1.5	Anticline (1st option)—Identity and existence certain, location inferred			
5.1.6	Anticline (1st option)—Identity or existence questionable, location inferred			
5.1.7	Anticline (1st option)—Identity and existence certain, location concealed			
5.1.8	Anticline (1st option)—Identity or existence questionable, location concealed			
5.1.9	Anticline (2nd option)—Identity and existence certain, location accurate			
5.1.10	Anticline (2nd option)—Identity or existence questionable, location accurate			
5.1.11	Anticline (2nd option)—Identity and existence certain, location approximate			
5.1.12	Anticline (2nd option)—Identity or existence questionable, location approximate			
5.1.13	Anticline (2nd option)—Identity and existence certain, location inferred			
5.1.14	Anticline (2nd option)—Identity or existence questionable, location inferred			
5.1.15	Anticline (2nd option)—Identity and existence certain, location concealed			
5.1.16	Anticline (2nd option)—Identity or existence questionable, location concealed			

\*For more information, see general guidelines on pages A-i to A-v.

**5—FOLDS (continued)**

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
<b>5.2—Antiforms</b>				
5.2.1	Antiform (1st option)—Identity and existence certain, location accurate			<p>Place fold trace where axial surface of antiform intersects the ground surface.</p> <p>Place arrows at places along fold trace to indicate overall fold type (antiform); do not place at specific locality where observation was made.</p> <p>Arrowheads may be added to show direction of plunge (see Section 5.10).</p> <p>Open-armed ("2nd option") symbols may be used to show a second generation or another instance of a particular fold type.</p> <p>May also be shown in black or other colors.</p>
5.2.2	Antiform (1st option)—Identity or existence questionable, location accurate			
5.2.3	Antiform (1st option)—Identity and existence certain, location approximate			
5.2.4	Antiform (1st option)—Identity or existence questionable, location approximate			
5.2.5	Antiform (1st option)—Identity and existence certain, location inferred			
5.2.6	Antiform (1st option)—Identity or existence questionable, location inferred			
5.2.7	Antiform (1st option)—Identity and existence certain, location concealed			
5.2.8	Antiform (1st option)—Identity or existence questionable, location concealed			
5.2.9	Antiform (2nd option)—Identity and existence certain, location accurate			
5.2.10	Antiform (2nd option)—Identity or existence questionable, location accurate			
5.2.11	Antiform (2nd option)—Identity and existence certain, location approximate			
5.2.12	Antiform (2nd option)—Identity or existence questionable, location approximate			
5.2.13	Antiform (2nd option)—Identity and existence certain, location inferred			
5.2.14	Antiform (2nd option)—Identity or existence questionable, location inferred			
5.2.15	Antiform (2nd option)—Identity and existence certain, location concealed			
5.2.16	Antiform (2nd option)—Identity or existence questionable, location concealed			

\*For more information, see general guidelines on pages A-i to A-v.

**5—FOLDS (continued)**

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
<b>5.3—Asymmetric, overturned, and inverted anticlines</b>				
5.3.1	Asymmetric anticline (1st option)—Identity and existence certain, location accurate. Beds are upright; shorter arrow on steeper limb			<p>Place fold trace where axial surface of asymmetric anticline intersects the ground surface.</p> <p>Place arrows at places along fold trace to indicate overall fold type (asymmetric anticline); do not place at specific locality where observation was made.</p> <p>Arrowheads may be added to show direction of plunge (see Section 5.10).</p> <p>Open-arrowed ("2nd option") symbols may be used to show a second generation or another instance of a particular fold type.</p> <p>May also be shown in black or other colors.</p>
5.3.2	Asymmetric anticline (1st option)—Identity or existence questionable, location accurate. Beds are upright; shorter arrow on steeper limb			
5.3.3	Asymmetric anticline (1st option)—Identity and existence certain, location approximate. Beds are upright; shorter arrow on steeper limb			
5.3.4	Asymmetric anticline (1st option)—Identity or existence questionable, location approximate. Beds are upright; shorter arrow on steeper limb			
5.3.5	Asymmetric anticline (1st option)—Identity and existence certain, location inferred. Beds are upright; shorter arrow on steeper limb			
5.3.6	Asymmetric anticline (1st option)—Identity or existence questionable, location inferred. Beds are upright; shorter arrow on steeper limb			
5.3.7	Asymmetric anticline (1st option)—Identity and existence certain, location concealed. Beds are upright; shorter arrow on steeper limb			
5.3.8	Asymmetric anticline (1st option)—Identity or existence questionable, location concealed. Beds are upright; shorter arrow on steeper limb			
5.3.9	Asymmetric anticline (2nd option)—Identity and existence certain, location accurate. Beds are upright; shorter arrow on steeper limb			
5.3.10	Asymmetric anticline (2nd option)—Identity or existence questionable, location accurate. Beds are upright; shorter arrow on steeper limb			
5.3.11	Asymmetric anticline (2nd option)—Identity and existence certain, location approximate. Beds are upright; shorter arrow on steeper limb			
5.3.12	Asymmetric anticline (2nd option)—Identity or existence questionable, location approximate. Beds are upright; shorter arrow on steeper limb			
5.3.13	Asymmetric anticline (2nd option)—Identity and existence certain, location inferred. Beds are upright; shorter arrow on steeper limb			
5.3.14	Asymmetric anticline (2nd option)—Identity or existence questionable, location inferred. Beds are upright; shorter arrow on steeper limb			
5.3.15	Asymmetric anticline (2nd option)—Identity and existence certain, location concealed. Beds are upright; shorter arrow on steeper limb			
5.3.16	Asymmetric anticline (2nd option)—Identity or existence questionable, location concealed. Beds are upright; shorter arrow on steeper limb			
5.3.17	Overturned anticline (1st option)—Identity and existence certain, location accurate. Beds on one limb are overturned; arrows show dip direction of limbs			<p>Place fold trace where axial surface of overturned anticline intersects the ground surface.</p> <p>Place arrows at places along fold trace to indicate overall fold type (overturned anticline); do not place at specific locality where observation was made.</p> <p>Arrowheads may be added to show direction of plunge (see Section 5.10).</p> <p>Open-arrowed ("2nd option") symbols may be used to show a second generation or another instance of a particular fold type.</p> <p>May also be shown in black or other colors.</p>
5.3.18	Overturned anticline (1st option)—Identity or existence questionable, location accurate. Beds on one limb are overturned; arrows show dip direction of limbs			
5.3.19	Overturned anticline (1st option)—Identity and existence certain, location approximate. Beds on one limb are overturned; arrows show dip direction of limbs			
5.3.20	Overturned anticline (1st option)—Identity or existence questionable, location approximate. Beds on one limb are overturned; arrows show dip direction of limbs			
5.3.21	Overturned anticline (1st option)—Identity and existence certain, location inferred. Beds on one limb are overturned; arrows show dip direction of limbs			
5.3.22	Overturned anticline (1st option)—Identity or existence questionable, location inferred. Beds on one limb are overturned; arrows show dip direction of limbs			
5.3.23	Overturned anticline (1st option)—Identity and existence certain, location concealed. Beds on one limb are overturned; arrows show dip direction of limbs			
5.3.24	Overturned anticline (1st option)—Identity or existence questionable, location concealed. Beds on one limb are overturned; arrows show dip direction of limbs			

**5—FOLDS (continued)**

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
<b>5.3—Asymmetric, overturned, and inverted anticlines (continued)</b>				
5.3.25	Overturned anticline (2nd option)—Identity and existence certain, location accurate. Beds on one limb are overturned; arrows show dip direction of limbs			Place fold trace where axial surface of overturned anticline intersects the ground surface.
5.3.26	Overturned anticline (2nd option)—Identity or existence questionable, location accurate. Beds on one limb are overturned; arrows show dip direction of limbs			
5.3.27	Overturned anticline (2nd option)—Identity and existence certain, location approximate. Beds on one limb are overturned; arrows show dip direction of limbs			Place arrows at places along fold trace to indicate overall fold type (overturned anticline); do not place at specific locality where observation was made.
5.3.28	Overturned anticline (2nd option)—Identity or existence questionable, location approximate. Beds on one limb are overturned; arrows show dip direction of limbs			
5.3.29	Overturned anticline (2nd option)—Identity and existence certain, location inferred. Beds on one limb are overturned; arrows show dip direction of limbs			Arrowheads may be added to show direction of plunge (see Section 5.10). Open-arrowed ("2nd option") symbols may be used to show a second generation or another instance of a particular fold type. May also be shown in black or other colors.
5.3.30	Overturned anticline (2nd option)—Identity or existence questionable, location inferred. Beds on one limb are overturned; arrows show dip direction of limbs			
5.3.31	Overturned anticline (2nd option)—Identity and existence certain, location concealed. Beds on one limb are overturned; arrows show dip direction of limbs			
5.3.32	Overturned anticline (2nd option)—Identity or existence questionable, location concealed. Beds on one limb are overturned; arrows show dip direction of limbs			
5.3.33	Inverted anticline (1st option)—Identity and existence certain, location accurate. Beds on both limbs are overturned; arrows show dip direction of limbs			Place fold trace where axial surface of inverted anticline intersects the ground surface.
5.3.34	Inverted anticline (1st option)—Identity or existence questionable, location accurate. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.3.35	Inverted anticline (1st option)—Identity and existence certain, location approximate. Beds on both limbs are overturned; arrows show dip direction of limbs			Place arrows at places along fold trace to indicate overall fold type (inverted anticline); do not place at specific locality where observation was made.
5.3.36	Inverted anticline (1st option)—Identity or existence questionable, location approximate. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.3.37	Inverted anticline (1st option)—Identity and existence certain, location inferred. Beds on both limbs are overturned; arrows show dip direction of limbs			Arrowheads may be added to show direction of plunge (see Section 5.10). Open-arrowed ("2nd option") symbols may be used to show a second generation or another instance of a particular fold type. May also be shown in black or other colors.
5.3.38	Inverted anticline (1st option)—Identity or existence questionable, location inferred. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.3.39	Inverted anticline (1st option)—Identity and existence certain, location concealed. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.3.40	Inverted anticline (1st option)—Identity or existence questionable, location concealed. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.3.41	Inverted anticline (2nd option)—Identity and existence certain, location accurate. Beds on both limbs are overturned; arrows show dip direction of limbs			Place fold trace where axial surface of inverted anticline intersects the ground surface.
5.3.42	Inverted anticline (2nd option)—Identity or existence questionable, location accurate. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.3.43	Inverted anticline (2nd option)—Identity and existence certain, location approximate. Beds on both limbs are overturned; arrows show dip direction of limbs			Place arrows at places along fold trace to indicate overall fold type (inverted anticline); do not place at specific locality where observation was made.
5.3.44	Inverted anticline (2nd option)—Identity or existence questionable, location approximate. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.3.45	Inverted anticline (2nd option)—Identity and existence certain, location inferred. Beds on both limbs are overturned; arrows show dip direction of limbs			Arrowheads may be added to show direction of plunge (see Section 5.10). Open-arrowed ("2nd option") symbols may be used to show a second generation or another instance of a particular fold type. May also be shown in black or other colors.
5.3.46	Inverted anticline (2nd option)—Identity or existence questionable, location inferred. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.3.47	Inverted anticline (2nd option)—Identity and existence certain, location concealed. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.3.48	Inverted anticline (2nd option)—Identity or existence questionable, location concealed. Beds on both limbs are overturned; arrows show dip direction of limbs			

**5—FOLDS (continued)**

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
<b>5.4—Antiformal sheath folds</b>				
5.4.1	Antiformal sheath fold (1st option)—Identity and existence certain, location accurate		<p>color 100% magenta arrow linewidth .2 mm                      linewidth .25 mm 1.5 mm HB-8                      50° 1.475 mm .75 mm                      12.0 mm 1.25 mm radius</p> <p>3.5 mm                      .75 mm .75 mm</p> <p>1.5 mm                      .75 mm .75 mm</p> <p>.5 mm                      .75 mm .75 mm</p>	<p>Place fold trace where axial surface of antiformal sheath fold intersects the ground surface.</p> <p>Place arrows at places along fold trace to indicate overall fold type (antiformal sheath fold); do not place at specific locality where observation was made.</p> <p>Arrowheads may be added to show direction of plunge (see Section 5.10).</p> <p>Open-arrowed ("2nd option") symbols may be used to show a second generation or another instance of a particular fold type.</p> <p>May also be shown in black or other colors.</p>
5.4.2	Antiformal sheath fold (1st option)—Identity or existence questionable, location accurate			
5.4.3	Antiformal sheath fold (1st option)—Identity and existence certain, location approximate			
5.4.4	Antiformal sheath fold (1st option)—Identity or existence questionable, location approximate			
5.4.5	Antiformal sheath fold (1st option)—Identity and existence certain, location inferred			
5.4.6	Antiformal sheath fold (1st option)—Identity or existence questionable, location inferred			
5.4.7	Antiformal sheath fold (1st option)—Identity and existence certain, location concealed			
5.4.8	Antiformal sheath fold (1st option)—Identity or existence questionable, location concealed			
5.4.9	Antiformal sheath fold (2nd option)—Identity and existence certain, location accurate			
5.4.10	Antiformal sheath fold (2nd option)—Identity or existence questionable, location accurate			
5.4.11	Antiformal sheath fold (2nd option)—Identity and existence certain, location approximate			
5.4.12	Antiformal sheath fold (2nd option)—Identity or existence questionable, location approximate			
5.4.13	Antiformal sheath fold (2nd option)—Identity and existence certain, location inferred			
5.4.14	Antiformal sheath fold (2nd option)—Identity or existence questionable, location inferred			
5.4.15	Antiformal sheath fold (2nd option)—Identity and existence certain, location concealed			
5.4.16	Antiformal sheath fold (2nd option)—Identity or existence questionable, location concealed			

\*For more information, see general guidelines on pages A-i to A-v.

**5—FOLDS (continued)**

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
<b>5.5—Synclines</b>				
5.5.1	Syncline (1st option)—Identity and existence certain, location accurate			<p>Place fold trace where axial surface of syncline intersects the ground surface.</p> <p>Place arrows at places along fold trace to indicate overall fold type (syncline); do not place at specific locality where observation was made.</p> <p>Arrowheads may be added to show direction of plunge (see Section 5.10).</p> <p>Open-armed ("2nd option") symbols may be used to show a second generation or another instance of a particular fold type. May also be shown in black or other colors.</p>
5.5.2	Syncline (1st option)—Identity or existence questionable, location accurate			
5.5.3	Syncline (1st option)—Identity and existence certain, location approximate			
5.5.4	Syncline (1st option)—Identity or existence questionable, location approximate			
5.5.5	Syncline (1st option)—Identity and existence certain, location inferred			
5.5.6	Syncline (1st option)—Identity or existence questionable, location inferred			
5.5.7	Syncline (1st option)—Identity and existence certain, location concealed			
5.5.8	Syncline (1st option)—Identity or existence questionable, location concealed			
5.5.9	Syncline (2nd option)—Identity and existence certain, location accurate			
5.5.10	Syncline (2nd option)—Identity or existence questionable, location accurate			
5.5.11	Syncline (2nd option)—Identity and existence certain, location approximate			
5.5.12	Syncline (2nd option)—Identity or existence questionable, location approximate			
5.5.13	Syncline (2nd option)—Identity and existence certain, location inferred			
5.5.14	Syncline (2nd option)—Identity or existence questionable, location inferred			
5.5.15	Syncline (2nd option)—Identity and existence certain, location concealed			
5.5.16	Syncline (2nd option)—Identity or existence questionable, location concealed			

\*For more information, see general guidelines on pages A-i to A-v.

**5—FOLDS (continued)**

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
<b>5.6—Synforms</b>				
5.6.1	Synform (1st option)—Identity and existence certain, location accurate		arrow linewidth .2 mm color 100% magenta 60° HB-8 linewidth .25 mm 2.725 mm 12.0 mm 1.475 mm .75 mm	Place fold trace where axial surface of synform intersects the ground surface.
5.6.2	Synform (1st option)—Identity or existence questionable, location accurate			
5.6.3	Synform (1st option)—Identity and existence certain, location approximate		3.5 mm .75 mm .75 mm	Place arrows at places along fold trace to indicate overall fold type (synform); do not place at specific locality where observation was made.
5.6.4	Synform (1st option)—Identity or existence questionable, location approximate			
5.6.5	Synform (1st option)—Identity and existence certain, location inferred		1.5 mm .75 mm .75 mm	Arrowheads may be added to show direction of plunge (see Section 5.10). Open-armed ("2nd option") symbols may be used to show a second generation or another instance of a particular fold type.
5.6.6	Synform (1st option)—Identity or existence questionable, location inferred			
5.6.7	Synform (1st option)—Identity and existence certain, location concealed		.5 mm .75 mm .75 mm	May also be shown in black or other colors.
5.6.8	Synform (1st option)—Identity or existence questionable, location concealed			
5.6.9	Synform (2nd option)—Identity and existence certain, location accurate		arrow linewidth .2 mm color 100% magenta 60° HB-8 linewidth .25 mm 2.725 mm 12.0 mm 1.475 mm .75 mm	
5.6.10	Synform (2nd option)—Identity or existence questionable, location accurate			
5.6.11	Synform (2nd option)—Identity and existence certain, location approximate		3.5 mm .75 mm .75 mm	
5.6.12	Synform (2nd option)—Identity or existence questionable, location approximate			
5.6.13	Synform (2nd option)—Identity and existence certain, location inferred		1.5 mm .75 mm .75 mm	
5.6.14	Synform (2nd option)—Identity or existence questionable, location inferred			
5.6.15	Synform (2nd option)—Identity and existence certain, location concealed		.5 mm .75 mm .75 mm	
5.6.16	Synform (2nd option)—Identity or existence questionable, location concealed			

\*For more information, see general guidelines on pages A-i to A-v.

**5—FOLDS (continued)**

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
<b>5.7—Asymmetric, overturned, and inverted synclines</b>				
5.7.1	Asymmetric syncline (1st option)—Identity and existence certain, location accurate. Beds are upright; shorter arrow on steeper limb			<p>Place fold trace where axial surface of asymmetric syncline intersects the ground surface.</p> <p>Place arrows at places along fold trace to indicate overall fold type (asymmetric syncline); do not place at specific locality where observation was made.</p> <p>Arrowheads may be added to show direction of plunge (see Section 5.10).</p> <p>Open-armed ("2nd option") symbols may be used to show a second generation or another instance of a particular fold type. May also be shown in black or other colors.</p>
5.7.2	Asymmetric syncline (1st option)—Identity or existence questionable, location accurate. Beds are upright; shorter arrow on steeper limb			
5.7.3	Asymmetric syncline (1st option)—Identity and existence certain, location approximate. Beds are upright; shorter arrow on steeper limb			
5.7.4	Asymmetric syncline (1st option)—Identity or existence questionable, location approximate. Beds are upright; shorter arrow on steeper limb			
5.7.5	Asymmetric syncline (1st option)—Identity and existence certain, location inferred. Beds are upright; shorter arrow on steeper limb			
5.7.6	Asymmetric syncline (1st option)—Identity or existence questionable, location inferred. Beds are upright; shorter arrow on steeper limb			
5.7.7	Asymmetric syncline (1st option)—Identity and existence certain, location concealed. Beds are upright; shorter arrow on steeper limb			
5.7.8	Asymmetric syncline (1st option)—Identity or existence questionable, location concealed. Beds are upright; shorter arrow on steeper limb			
5.7.9	Asymmetric syncline (2nd option)—Identity and existence certain, location accurate. Beds are upright; shorter arrow on steeper limb			
5.7.10	Asymmetric syncline (2nd option)—Identity or existence questionable, location accurate. Beds are upright; shorter arrow on steeper limb			
5.7.11	Asymmetric syncline (2nd option)—Identity and existence certain, location approximate. Beds are upright; shorter arrow on steeper limb			
5.7.12	Asymmetric syncline (2nd option)—Identity or existence questionable, location approximate. Beds are upright; shorter arrow on steeper limb			
5.7.13	Asymmetric syncline (2nd option)—Identity and existence certain, location inferred. Beds are upright; shorter arrow on steeper limb			
5.7.14	Asymmetric syncline (2nd option)—Identity or existence questionable, location inferred. Beds are upright; shorter arrow on steeper limb			
5.7.15	Asymmetric syncline (2nd option)—Identity and existence certain, location concealed. Beds are upright; shorter arrow on steeper limb			
5.7.16	Asymmetric syncline (2nd option)—Identity or existence questionable, location concealed. Beds are upright; shorter arrow on steeper limb			
5.7.17	Overturned syncline (1st option)—Identity and existence certain, location accurate. Beds on one limb are overturned; arrows show dip direction of limbs			
5.7.18	Overturned syncline (1st option)—Identity or existence questionable, location accurate. Beds on one limb are overturned; arrows show dip direction of limbs			
5.7.19	Overturned syncline (1st option)—Identity and existence certain, location approximate. Beds on one limb are overturned; arrows show dip direction of limbs			
5.7.20	Overturned syncline (1st option)—Identity or existence questionable, location approximate. Beds on one limb are overturned; arrows show dip direction of limbs			
5.7.21	Overturned syncline (1st option)—Identity and existence certain, location inferred. Beds on one limb are overturned; arrows show dip direction of limbs			
5.7.22	Overturned syncline (1st option)—Identity or existence questionable, location inferred. Beds on one limb are overturned; arrows show dip direction of limbs			
5.7.23	Overturned syncline (1st option)—Identity and existence certain, location concealed. Beds on one limb are overturned; arrows show dip direction of limbs			
5.7.24	Overturned syncline (1st option)—Identity or existence questionable, location concealed. Beds on one limb are overturned; arrows show dip direction of limbs			



**5—FOLDS (continued)**

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
<b>5.7—Asymmetric, overturned, and inverted synclines (continued)</b>				
5.7.25	Overturned syncline (2nd option)—Identity and existence certain, location accurate. Beds on one limb are overturned; arrows show dip direction of limbs			Place fold trace where axial surface of overturned syncline intersects the ground surface. Place arrows at places along fold trace to indicate overall fold type (overturned syncline); do not place at specific locality where observation was made. Arrowheads may be added to show direction of plunge (see Section 5.10). Open-arrowed ("2nd option") symbols may be used to show a second generation or another instance of a particular fold type. May also be shown in black or other colors.
5.7.26	Overturned syncline (2nd option)—Identity or existence questionable, location accurate. Beds on one limb are overturned; arrows show dip direction of limbs			
5.7.27	Overturned syncline (2nd option)—Identity and existence certain, location approximate. Beds on one limb are overturned; arrows show dip direction of limbs			
5.7.28	Overturned syncline (2nd option)—Identity or existence questionable, location approximate. Beds on one limb are overturned; arrows show dip direction of limbs			
5.7.29	Overturned syncline (2nd option)—Identity and existence certain, location inferred. Beds on one limb are overturned; arrows show dip direction of limbs			
5.7.30	Overturned syncline (2nd option)—Identity or existence questionable, location inferred. Beds on one limb are overturned; arrows show dip direction of limbs			
5.7.31	Overturned syncline (2nd option)—Identity and existence certain, location concealed. Beds on one limb are overturned; arrows show dip direction of limbs			
5.7.32	Overturned syncline (2nd option)—Identity or existence questionable, location concealed. Beds on one limb are overturned; arrows show dip direction of limbs			
5.7.33	Inverted syncline (1st option)—Identity and existence certain, location accurate. Beds on both limbs are overturned; arrows show dip direction of limbs			Place fold trace where axial surface of inverted syncline intersects the ground surface. Place arrows at places along fold trace to indicate overall fold type (inverted syncline); do not place at specific locality where observation was made. Arrowheads may be added to show direction of plunge (see Section 5.10). Open-arrowed ("2nd option") symbols may be used to show a second generation or another instance of a particular fold type. May also be shown in black or other colors.
5.7.34	Inverted syncline (1st option)—Identity or existence questionable, location accurate. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.7.35	Inverted syncline (1st option)—Identity and existence certain, location approximate. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.7.36	Inverted syncline (1st option)—Identity or existence questionable, location approximate. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.7.37	Inverted syncline (1st option)—Identity and existence certain, location inferred. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.7.38	Inverted syncline (1st option)—Identity or existence questionable, location inferred. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.7.39	Inverted syncline (1st option)—Identity and existence certain, location concealed. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.7.40	Inverted syncline (1st option)—Identity or existence questionable, location concealed. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.7.41	Inverted syncline (2nd option)—Identity and existence certain, location accurate. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.7.42	Inverted syncline (2nd option)—Identity or existence questionable, location accurate. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.7.43	Inverted syncline (2nd option)—Identity and existence certain, location approximate. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.7.44	Inverted syncline (2nd option)—Identity or existence questionable, location approximate. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.7.45	Inverted syncline (2nd option)—Identity and existence certain, location inferred. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.7.46	Inverted syncline (2nd option)—Identity or existence questionable, location inferred. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.7.47	Inverted syncline (2nd option)—Identity and existence certain, location concealed. Beds on both limbs are overturned; arrows show dip direction of limbs			
5.7.48	Inverted syncline (2nd option)—Identity or existence questionable, location concealed. Beds on both limbs are overturned; arrows show dip direction of limbs			

**5—FOLDS (continued)**

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
<b>5.8—Synformal sheath folds</b>				
5.8.1	Synformal sheath fold (1st option)—Identity and existence certain, location accurate		<i>color 100% magenta</i> <i>arrow linewidth .2 mm</i> 1.475 mm HB-8 50° 1.5 mm .75 mm 12.0 mm   1.25 mm radius linewidth .25 mm	Place fold trace where axial surface of synformal sheath fold intersects the ground surface.  Place arrows at places along fold trace to indicate overall fold type (synformal sheath fold); do not place at specific locality where observation was made.  Arrowheads may be added to show direction of plunge (see Section 5.10).  Open-arrowed ("2nd option") symbols may be used to show a second generation or another instance of a particular fold type.  May also be shown in black or other colors.
5.8.2	Synformal sheath fold (1st option)—Identity or existence questionable, location accurate			
5.8.3	Synformal sheath fold (1st option)—Identity and existence certain, location approximate		3.5 mm .75 mm    .75 mm	
5.8.4	Synformal sheath fold (1st option)—Identity or existence questionable, location approximate			
5.8.5	Synformal sheath fold (1st option)—Identity and existence certain, location inferred		1.5 mm .75 mm    .75 mm	
5.8.6	Synformal sheath fold (1st option)—Identity or existence questionable, location inferred			
5.8.7	Synformal sheath fold (1st option)—Identity and existence certain, location concealed		.5 mm .75 mm    .75 mm	
5.8.8	Synformal sheath fold (1st option)—Identity or existence questionable, location concealed			
5.8.9	Synformal sheath fold (2nd option)—Identity and existence certain, location accurate		<i>color 100% magenta</i> <i>arrow linewidth .2 mm</i> 1.475 mm HB-8 50° 1.5 mm .75 mm 12.0 mm   1.25 mm radius linewidth .25 mm	
5.8.10	Synformal sheath fold (2nd option)—Identity or existence questionable, location accurate			
5.8.11	Synformal sheath fold (2nd option)—Identity and existence certain, location approximate		3.5 mm .75 mm    .75 mm	
5.8.12	Synformal sheath fold (2nd option)—Identity or existence questionable, location approximate			
5.8.13	Synformal sheath fold (2nd option)—Identity and existence certain, location inferred		1.5 mm .75 mm    .75 mm	
5.8.14	Synformal sheath fold (2nd option)—Identity or existence questionable, location inferred			
5.8.15	Synformal sheath fold (2nd option)—Identity and existence certain, location concealed		.5 mm .75 mm    .75 mm	
5.8.16	Synformal sheath fold (2nd option)—Identity or existence questionable, location concealed			

\*For more information, see general guidelines on pages A-i to A-v.

**5—FOLDS (continued)**

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
<b>5.9—Monoclines</b>				
5.9.1	Monocline (1st option)—Identity and existence certain, location accurate. Arrow shows direction of dip			Use to show monocline whose anticlinal and synclinal bends are too close together at map scale to show as separate fold traces.
5.9.2	Monocline (1st option)—Identity or existence questionable, location accurate. Arrow shows direction of dip			
5.9.3	Monocline (1st option)—Identity and existence certain, location approximate. Arrow shows direction of dip			Place fold trace where dip of surface connecting anticlinal and synclinal bends is at its maximum angle.
5.9.4	Monocline (1st option)—Identity or existence questionable, location approximate. Arrow shows direction of dip			
5.9.5	Monocline (1st option)—Identity and existence certain, location inferred. Arrow shows direction of dip			Place arrow at places along fold trace to indicate overall fold type (monocline); do not place at specific locality where observation was made.
5.9.6	Monocline (1st option)—Identity or existence questionable, location inferred. Arrow shows direction of dip			
5.9.7	Monocline (1st option)—Identity and existence certain, location concealed. Arrow shows direction of dip			Arrowheads may be added to show direction of plunge (see Section 5.10). Open-arrowed ("2nd option") symbols may be used to show a second generation or another instance of a particular fold type.
5.9.8	Monocline (1st option)—Identity or existence questionable, location concealed. Arrow shows direction of dip			
5.9.9	Monocline (2nd option)—Identity and existence certain, location accurate. Arrow shows direction of dip			May also be shown in black or other colors.
5.9.10	Monocline (2nd option)—Identity or existence questionable, location accurate. Arrow shows direction of dip			
5.9.11	Monocline (2nd option)—Identity and existence certain, location approximate. Arrow shows direction of dip			
5.9.12	Monocline (2nd option)—Identity or existence questionable, location approximate. Arrow shows direction of dip			
5.9.13	Monocline (2nd option)—Identity and existence certain, location inferred. Arrow shows direction of dip			
5.9.14	Monocline (2nd option)—Identity or existence questionable, location inferred. Arrow shows direction of dip			
5.9.15	Monocline (2nd option)—Identity and existence certain, location concealed. Arrow shows direction of dip			
5.9.16	Monocline (2nd option)—Identity or existence questionable, location concealed. Arrow shows direction of dip			
5.9.17	Monocline, anticlinal bend (1st option)—Identity and existence certain, location accurate. Arrows show direction of dip; shorter arrow on steeper limb			Place fold trace where axial surface of anticlinal bend of monocline intersects the ground surface.
5.9.18	Monocline, anticlinal bend (1st option)—Identity or existence questionable, location accurate. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.19	Monocline, anticlinal bend (1st option)—Identity and existence certain, location approximate. Arrows show direction of dip; shorter arrow on steeper limb			Place arrows at places along fold trace to indicate overall fold type (anticlinal bend of monocline); do not place at specific locality where observation was made.
5.9.20	Monocline, anticlinal bend (1st option)—Identity or existence questionable, location approximate. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.21	Monocline, anticlinal bend (1st option)—Identity and existence certain, location inferred. Arrows show direction of dip; shorter arrow on steeper limb			Arrowheads may be added to show direction of plunge (see Section 5.10).
5.9.22	Monocline, anticlinal bend (1st option)—Identity or existence questionable, location inferred. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.23	Monocline, anticlinal bend (1st option)—Identity and existence certain, location concealed. Arrows show direction of dip; shorter arrow on steeper limb			Open-arrowed ("2nd option") symbols may be used to show a second generation or another instance of a particular fold type.
5.9.24	Monocline, anticlinal bend (1st option)—Identity or existence questionable, location concealed. Arrows show direction of dip; shorter arrow on steeper limb			

**5—FOLDS (continued)**

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
<b>5.9—Monoclines (continued)</b>				
5.9.25	Monocline, anticlinal bend (2nd option)—Identity and existence certain, location accurate. Arrows show direction of dip; shorter arrow on steeper limb			Place fold trace where axial surface of anticlinal bend of monocline intersects the ground surface. Place arrows at places along fold trace to indicate overall fold type (anticlinal bend of monocline); do not place at specific locality where observation was made. Arrowheads may be added to show direction of plunge (see Section 5.10). Open-armed ("2nd option") symbols may be used to show a second generation or another instance of a particular fold type. May also be shown in black or other colors.
5.9.26	Monocline, anticlinal bend (2nd option)—Identity or existence questionable, location accurate. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.27	Monocline, anticlinal bend (2nd option)—Identity and existence certain, location approximate. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.28	Monocline, anticlinal bend (2nd option)—Identity or existence questionable, location approximate. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.29	Monocline, anticlinal bend (2nd option)—Identity and existence certain, location inferred. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.30	Monocline, anticlinal bend (2nd option)—Identity or existence questionable, location inferred. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.31	Monocline, anticlinal bend (2nd option)—Identity and existence certain, location concealed. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.32	Monocline, anticlinal bend (2nd option)—Identity or existence questionable, location concealed. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.33	Monocline, synclinal bend (1st option)—Identity and existence certain, location accurate. Arrows show direction of dip; shorter arrow on steeper limb			Place fold trace where axial surface of synclinal bend of monocline intersects the ground surface. Place arrows at places along fold trace to indicate overall fold type (synclinal bend of monocline); do not place at specific locality where observation was made. Arrowheads may be added to show direction of plunge (see Section 5.10). Open-armed ("2nd option") symbols may be used to show a second generation or another instance of a particular fold type. May also be shown in black or other colors.
5.9.34	Monocline, synclinal bend (1st option)—Identity or existence questionable, location accurate. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.35	Monocline, synclinal bend (1st option)—Identity and existence certain, location approximate. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.36	Monocline, synclinal bend (1st option)—Identity or existence questionable, location approximate. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.37	Monocline, synclinal bend (1st option)—Identity and existence certain, location inferred. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.38	Monocline, synclinal bend (1st option)—Identity or existence questionable, location inferred. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.39	Monocline, synclinal bend (1st option)—Identity and existence certain, location concealed. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.40	Monocline, synclinal bend (1st option)—Identity or existence questionable, location concealed. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.41	Monocline, synclinal bend (2nd option)—Identity and existence certain, location accurate. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.42	Monocline, synclinal bend (2nd option)—Identity or existence questionable, location accurate. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.43	Monocline, synclinal bend (2nd option)—Identity and existence certain, location approximate. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.44	Monocline, synclinal bend (2nd option)—Identity or existence questionable, location approximate. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.45	Monocline, synclinal bend (2nd option)—Identity and existence certain, location inferred. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.46	Monocline, synclinal bend (2nd option)—Identity or existence questionable, location inferred. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.47	Monocline, synclinal bend (2nd option)—Identity and existence certain, location concealed. Arrows show direction of dip; shorter arrow on steeper limb			
5.9.48	Monocline, synclinal bend (2nd option)—Identity or existence questionable, location concealed. Arrows show direction of dip; shorter arrow on steeper limb			

**5—FOLDS (continued)**

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
<b>5.10—Line-symbol decorations and notations for folds</b>				
5.10.1	Fold having inclined axial surface (1st option)—Tick shows dip value and direction		HI-6 (100% black) — tick length 1.75 mm; linewidth .175 mm; color 100% magenta	Although only shown here on anticlines, line-symbol decorations and notations may be added to any type or style of fold. Add arrowhead or '90' to ticks showing dip if necessary for clarity. Place where observation was made.
5.10.2	Fold having inclined axial surface (2nd option)—Tick shows dip value and direction		HI-6 (100% black) — tick length 1.375 mm; linewidth .175 mm; color 100% magenta	
5.10.3	Fold having vertical or near-vertical axial surface (1st option)		tick length 2.5 mm; linewidth .175 mm; color 100% magenta	
5.10.4	Fold having vertical or near-vertical axial surface (2nd option)		HI-6 (100% black) — tick length 2.5 mm; linewidth .175 mm; color 100% magenta	
5.10.5	Plunging anticline—Large arrowhead shows direction of plunge		1.5 mm — color 100% magenta	Although only shown here on anticlines and synclines, line-symbol decorations and notations may be added to any type or style of fold. Place arrowhead(s) showing plunge at end(s) of, or along, any type or style of fold to indicate general plunge direction(s); do not add plunge angle.
5.10.6	Doubly plunging anticline		1.5 mm — color 100% magenta	
5.10.7	Plunging syncline—Large arrowhead shows direction of plunge		1.5 mm — color 100% magenta	
5.10.8	Doubly plunging syncline		1.5 mm — color 100% magenta	
5.10.9	Fold having near-vertical fold limbs—Half-circle shows direction of closure		radius 1.25 mm; linewidth .2 mm; color 100% magenta	Although only shown here on anticlines and synclines, line-symbol decorations and notations may be added to any type or style of fold.
5.10.10	Crest line (CL) of fold where it diverges from axial surface of anticline		H-7 — dash length 2.0 mm; spacing .5 mm; linewidth .2 mm	
5.10.11	Trough line (TL) of fold where it diverges from axial surface of syncline		H-7 — dash length 2.0 mm; spacing .5 mm; linewidth .2 mm	
5.10.12	Fold—Showing name		H-8 — text color 100% magenta	Letter size or spacing may be increased on longer fold segments.

\*For more information, see general guidelines on pages A-i to A-v.

**5—FOLDS (continued)**

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
<b>5.11—Small, minor folds</b>				
5.11.1	Small, minor fold, horizontal axial surface		color 100% magenta circle diameter 3.0 mm; linewidth .2 mm crossbar linewidth .25 mm	Use when beds are too tightly folded to show traces of individual folds or when small, minor folds are observed in outcrop but cannot be traced away from that outcrop. Open-armed ("2nd option") symbols may be used to show a second generation or another instance of a particular fold type. May also be shown in black or other colors.
5.11.2	Small, minor dome		color 100% magenta 5.5 mm 40° linewidth .2 mm 1.475 mm	
5.11.3	Small, minor basin		color 100% magenta 5.5 mm 40° linewidth .2 mm 1.475 mm	
5.11.4	Small, minor anticline, vertical or near-vertical axial surface (1st option)—Showing strike		color 100% magenta 2.75 mm 40° arrow linewidth .2 mm 6.0 mm 1.475 mm linewidth .25 mm	
5.11.5	Small, minor anticline, inclined axial surface (1st option)—Showing strike and dip		HI-6 (100% black) 35 tick length 1.75 mm; linewidth .2 mm; color 100% magenta 9.0 mm	
5.11.6	Small, minor anticline, vertical or near-vertical axial surface (2nd option)—Showing strike		color 100% magenta 2.75 mm 40° arrow linewidth .2 mm 6.0 mm 1.475 mm linewidth .25 mm	
5.11.7	Small, minor anticline, inclined axial surface (2nd option)—Showing strike and dip		HI-6 (100% black) 35 tick length 1.75 mm; linewidth .2 mm; color 100% magenta 9.0 mm	
5.11.8	Small, minor antiform, vertical or near-vertical axial surface (1st option)—Showing strike		color 100% magenta 2.75 mm 60° arrow linewidth .2 mm 6.0 mm 1.475 mm linewidth .25 mm	
5.11.9	Small, minor antiform, inclined axial surface (1st option)—Showing strike and dip		HI-6 (100% black) 35 tick length 1.75 mm; linewidth .2 mm; color 100% magenta 9.0 mm	
5.11.10	Small, minor antiform, vertical or near-vertical axial surface (2nd option)—Showing strike		color 100% magenta 2.75 mm 60° arrow linewidth .2 mm 6.0 mm 1.475 mm linewidth .25 mm	
5.11.11	Small, minor antiform, inclined axial surface (2nd option)—Showing strike and dip		HI-6 (100% black) 35 tick length 1.75 mm; linewidth .2 mm; color 100% magenta 9.0 mm	
5.11.12	Small, minor asymmetric anticline, vertical or near-vertical axial surface (1st option)—Showing strike		color 100% magenta 2.25 mm 40° arrow linewidth .2 mm 6.0 mm 1.475 mm linewidth .25 mm 3.5 mm	
5.11.13	Small, minor asymmetric anticline, inclined axial surface (1st option)—Showing strike and dip		HI-6 (100% black) 35 tick length 1.75 mm; linewidth .2 mm; color 100% magenta 9.0 mm	
5.11.14	Small, minor asymmetric anticline, vertical or near-vertical axial surface (2nd option)—Showing strike		color 100% magenta 2.25 mm 40° arrow linewidth .2 mm 6.0 mm 1.475 mm linewidth .25 mm 3.5 mm	
5.11.15	Small, minor asymmetric anticline, inclined axial surface (2nd option)—Showing strike and dip		HI-6 (100% black) 35 tick length 1.75 mm; linewidth .2 mm; color 100% magenta 9.0 mm	
5.11.16	Small, minor overturned anticline, vertical or near-vertical axial surface (1st option)—Showing strike		color 100% magenta 2.275 mm 40° arrow linewidth .2 mm 1.0 mm radius 6.0 mm 1.475 mm linewidth .25 mm	
5.11.17	Small, minor overturned anticline, inclined axial surface (1st option)—Showing strike and dip		HI-6 (100% black) 35 tick length 1.75 mm; linewidth .2 mm; color 100% magenta 9.0 mm	
5.11.18	Small, minor overturned anticline, vertical or near-vertical axial surface (2nd option)—Showing strike		color 100% magenta 2.275 mm 40° arrow linewidth .2 mm 1.0 mm radius 6.0 mm 1.475 mm linewidth .25 mm	
5.11.19	Small, minor overturned anticline, inclined axial surface (2nd option)—Showing strike and dip		HI-6 (100% black) 35 tick length 1.75 mm; linewidth .2 mm; color 100% magenta 9.0 mm	
5.11.20	Small, minor inverted anticline, vertical or near-vertical axial surface (1st option)—Showing strike		color 100% magenta .875 mm radius 40° arrow linewidth .2 mm 6.0 mm 1.475 mm linewidth .25 mm 2.25 mm	
5.11.21	Small, minor inverted anticline, inclined axial surface (1st option)—Showing strike and dip		HI-6 (100% black) 35 tick length 1.75 mm; linewidth .2 mm; color 100% magenta 9.0 mm	
5.11.22	Small, minor inverted anticline, vertical or near-vertical axial surface (2nd option)—Showing strike		color 100% magenta .875 mm radius 40° arrow linewidth .2 mm 6.0 mm 1.475 mm linewidth .25 mm 2.25 mm	
5.11.23	Small, minor inverted anticline, inclined axial surface (2nd option)—Showing strike and dip		HI-6 (100% black) 35 tick length 1.75 mm; linewidth .2 mm; color 100% magenta 9.0 mm	

\*For more information, see general guidelines on pages A-i to A-v.

