

### 4—LINEAMENTS AND JOINTS

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
<b>4.1—Lineaments</b>				
4.1.1	Lineament		lineweight .375 mm 	Use to show linear features that have been determined from aerial photographs or remotely sensed imagery but not identified on the ground.
4.1.2	Lineament—Showing name	<u>OLYMPIC-WALLOWA</u>	<u>OLYMPIC-WALLOWA</u> ← H-7	
<b>4.2—Joints</b>				
4.2.1	Joint—Identity and existence certain, location accurate		lineweight .3 mm	Use to show regional joint patterns or single joints that are mappable beyond outcrop. May also be shown in red or other colors.
4.2.2	Joint—Identity and existence certain, location approximate		2.0 mm 	
4.2.3	Inclined joint (1st option)—Showing dip value and direction		tick length 1.75 mm; lineweight .2 mm 	Place tick where observation was made. Add arrowhead or '90' to tick if necessary for clarity.
4.2.4	Inclined joint (2nd option)—Showing dip value and direction		tick length 1.375 mm; lineweight .2 mm 	
4.2.5	Vertical or subvertical joint (1st option)		tick length 2.5 mm; lineweight .2 mm	
4.2.6	Vertical or subvertical joint (2nd option)		90 ← HI-6	
<b>4.3—Small, minor joints</b>				
4.3.1	Small, minor horizontal joint (1st option)		lineweight .2 mm 	Use to show small, minor joints that are observed in outcrop but that cannot be traced away from that outcrop. For symbols representing a single observation at one locality, point of observation is the mid-point of the strike line. For multiple observations at one locality, joint symbols at the "tail" ends of the strike lines (opposite the ornamentation); the junction point is at point of observation. To obey the right-hand rule, use the "dip direction to right" symbols (use "dip direction to left" symbols only when necessary to prevent overcrowding). May also be shown in red or other colors.
4.3.2	Small, minor inclined joint (1st option)—Showing strike and dip		1.125 mm 	
4.3.3	Small, minor vertical or near-vertical joint (1st option)—Showing strike		1.125 mm 	
4.3.4	Small, minor inclined (dip direction to right) joint, for multiple observations at one locality (1st option)—Showing strike and dip		5.5 mm 	
4.3.5	Small, minor inclined (dip direction to left) joint, for multiple observations at one locality (1st option)—Showing strike and dip		60	
4.3.6	Small, minor vertical or near-vertical joint, for multiple observations at one locality (1st option)—Showing strike		5.5 mm 	
4.3.7	Small, minor horizontal joint (2nd option)		all lineweights .2 mm 	
4.3.8	Small, minor inclined joint (2nd option)—Showing strike and dip		1.125 mm 	
4.3.9	Small, minor vertical or near-vertical joint (2nd option)—Showing strike		1.125 mm 	
4.3.10	Small, minor inclined (dip direction to right) joint, for multiple observations at one locality (2nd option)—Showing strike and dip		5.5 mm 	
4.3.11	Small, minor inclined (dip direction to left) joint, for multiple observations at one locality (2nd option)—Showing strike and dip		70	
4.3.12	Small, minor vertical or near-vertical joint, for multiple observations at one locality (2nd option)—Showing strike		5.5 mm 	

\*For more information, see general guidelines on pages A-1 to A-v.