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Surficial Geologic Map and Cross-Section Northwest Corner of the Mount Worcester 7.5-minute Quadrangle, Vermont

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Explanation			
af	af Artificial Fill: Artificially-emplaced material along road beds, embankments and in developed areas. Material varies from natural sand, gravel, or till to various artificial waste materials. Thickness varies.	Pt	Pt Glacial Till: Very dense to loose, unsorted to very poorly sorted material deposited directly from glacial ice. Contains a wide range of grain sizes, from clay or silt up to large boulders. Matrix commonly dominated by the silt or sand fraction. Surface boulders are generally common. Thickness is highly variable, from less than 3 meters to greater than 30 meters.
	Hw Wetlands Sediments: Accumulations of organic matter and/or clastic sediment in low-lying areas. Includes a wide variety of wetland types. Commonly overlying other deposits such as alluvium, lacustrine sediment, or till. Larger deposits are shown.	Symbols	
На	Ha Alluvium: Silt, sand, and gravel deposited by modern streams. Includes stream channel, bar, and floodplain deposits. Wetland deposits are common within these areas and are not distinguished. Thickness in tributary valleys is typically less than 3 meters, although the depth may be much greater in the valleys of the larger streams.		Abandoned Channel
Hat	Hat Alluvial Terrace Deposits: Silt, sand, and gravel deposited on terraces above the modern floodplains of streams. They are composed of a variety of channel, bar, and floodplain		Ice-Marginal Channel
	deposits. May include late Pleistocene alluvial sediment deposited onto freshly-drained glacial lake bottoms before the main stream and its tributaries incised down into the lacustrine deposits. Commonly less than 5 m thick.		Projected Glacial Lake Mansfield 1 Shoreline
Haf	Haf Alluvial Fan Deposits: Boulder, cobble, and pebble gravel, pebbly sand, and diamict deposited at sites where steep, stream gradients are sharply reduced. Holocene alluvial fans (Haf) are common at the mouths of steep tributaries where they meet the main stream.		Projected Glacial Lake Winooski Shoreline
Pld	Pldw Glacial Lake Delta: Well-sorted sand and gravel deposited in a glacial lake at the mouth of a tributary stream. Includes topset, foreset, and proximal bottomset beds. Pldm: Glacial Lake Mansfield delta Pldw: Glacial Lake Winooski delta	Additional Syr	Geologic Cross-Section
Pldw: Glacial Lake Winooski delta Additional Symbols			
PIf	Plf Lacustrine Deposits, Fine-grained: Clay, silt, and very-fine to fine sand deposited in quiet-water environments of a glacial lake. Commonly laminated.	•	Surficial Field Site
PI	PI Lacustrine Deposits, Undifferentiated: Coarse- to fine-grained sediment deposited in a glacial lake, generally in an ice-proximal environment. Grain size generally decreases up-section, but marked changes in grain size occur over short distance both laterally and vertically.	•	Bedrock Outcrop
Pldi	Pldi Stratified Diamict: Interbedded massive diamict layers and sandy layers fining upwards to silt-clay layers. Dropstones may be common in the stratified layers. Interpreted to represent subaqueous debris flows and turbidity flows	↑	Glacial Striation
	deposited in an ice-proximal setting. Diamict layers above shoreline are interpreted as subaerial debris flows.	•	Landslides
Pi	Pi Ice-Contact Deposits, Undifferentiated: Unsorted to poorly-sorted stratified sand, gravel, and silt deposited in contact with glacial ice. Surface may contain scattered kettle holes formed by melting of buried ice blocks or be a highly complex kame and kettle topography. Ice-marginal channels are common.		Till Lineation



