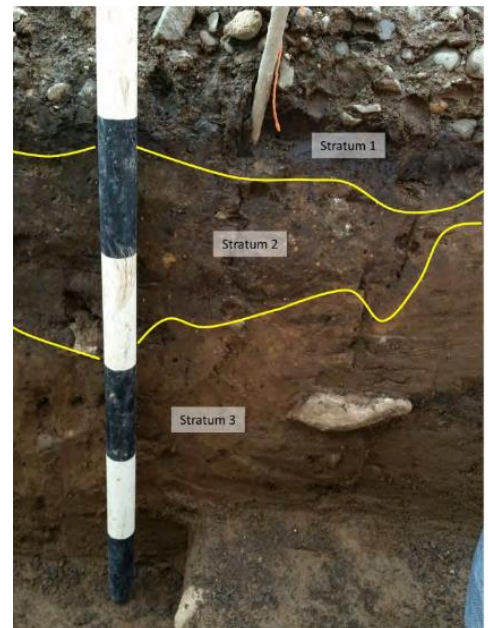


Archaeological Testing and Stratigraphic Profiling

Stratigraphy is geological term and system of identification that helps archaeologists better understand the soil layers and their stratification (layering known as stratum). A stratigraphic profile completed prior to redevelopment (as part of archaeological testing) is a good way to help us understand whether proposed ground disturbing activity will potentially impact native soils occupied by indigenous peoples and date any historic artifacts that may found during redevelopment or archaeological testing.



A stratigraphic profile not only defines the stratigraphic layers, but also relates these layers to general time periods and use. This is helpful because artifacts that are 75 years old or older found below ground are considered archaeological resources and are currently protected under the requirements of state, and local regulations. The photos above show the typical stratum found in Salem. The top layer is modern fill. Stratum 1 & 2 are from the historic period (1800-1900;1900-1946). Native soils (in Salem –seen in Stratum 3) are the layer in the stratigraphic profile which has been identified as the depth where Indigenous peoples occupied and used the land that is now occupied by residents of the City of Salem (10,000BCE-1800). Indigenous artifacts such as flaked stone tools, obsidian tools and arrowheads as well as waste flakes and beads could potentially be found within undisturbed soils at this level. These soils are typically a firm, dark brown (10YR 3/3 to 7.5YR 3/3) sandy, clayey silt with a subangular blocky structure. In Salem the depth of this Stratum has been observed at 30cm (12 inches) and as deep as 150cm (59 inches). Stratum 4 soils were deposited during the period of the Missoula flood (13,000-15,000 years ago) when water extended over this area and a large amount of gravel was deposited. When undisturbed, this layer does not typically contain any human deposited artifacts. The depth of this Stratum has been observed at 60cm(24inches) below the surface and as deep as 240cm (95 inches) below the surface.

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