The Solomon Richards Grist Mill faces west from a recessed lot on the north side of River Road. Parking lots surround it to the south and west. The Farmington River lies to the north and east. Remains of an old bridge can be seen northeast of the building.
Sited ridge-to-street, the Solomon Richards Grist Mill features five bays and a lean-to addition which makes a saltbox configuration. Original six-over-six sash remain on the second floor and single six sash on the third floor. The first floor has undergone extensive alteration which includes three sets of paired twelve-paned windows, modern door, and board and batten exterior, unlike the original and shingled clapboard found on the other stories. A small brick chimney rises from the center of the roof.

In 1832 millers Thomas and Joshua Youngs sold George L. Richards (1800-1880), also a miller and son of farmer Solomon Richards (1767-1848), ½ interest in their grist mill business (FLR 46:142). Joshua Youngs was one of the original founders of the Farmington River Water Power Company and the first settler to emancipate his slaves. According to historian Raymond Brooks, the grist mill dated back to the Revolution. In 1845 Richards received title to the remaining interest for $1200 (FLR 49:63). In 1850 he built a railroad siding to connect the mill with railroad cars carrying grain. He also served as the postmaster for 20 years and town assessor in 1859 and helped found the First Church of Christ, Congregational, Unionville. After his death in 1880, his eldest son Lucas (1827-1895) inherited the estate (FPR 16:146). Lucas, a papermaker, quit-claimed the grist mill to his brother Solomon (1829-1906), a miller, in 1882 (FLR 66:218). Solomon first married a woman named Margaret (1823-1857) and later married Myra Edyman (1837-1872). In 1887 the grist mill was destroyed by a fire and the present building was erected. After Solomon's death, his son George Lyman and his wife Frances inherited the grist mill which they sold to Lawton and Sons in 1914 (FLR 78:501). It has remained in the Lawton family since that time and today serves as the Lawton-Miner Company, dealers in oil.

The Solomon Richards Grist Mill has significant local historical associations with the Richards family and is the only grist mill in Unionville.