The history of St. Peter's Mission Church: As early as 1818 the first Irish immigrants were making homes on the 8th and 9th concessions in Trafalgar Township. Soon this area became referred to as the Catholic Swamp.

During the autumn of 1819 two young settlers, Bartholomew O'Connor and Charles O'Hara, walked the forty miles to Dundas and persuaded a Fr. O'Reilly to come to the little colony at Trafalgar to celebrate mass at Mr. O'Hara's cabin on Lot 1, Concession 9. Settlers from many miles around converged on the little cabin to receive the sacraments and to participate in the Holy Sacrifice for perhaps the first time since they had left Ireland. Visits by priests continued on an irregular basis until 1823, when a log church was constructed on an acre of cleared land on Lot 6 at the Ninth Line that had been donated by Dan Highland. Thereafter a priest came about once every four months. The week preceding his arrival would see the women of the community busily engaged in baking bread and roasting venison and potatoes to provide food for the large congregation that would gather as Catholics journeyed on foot from such distant places as Georgetown, Brampton, Port Credit and Burlington.

In the late 1820s the Catholic population in the county experienced a temporary decline. The land under cultivation was showing a diminishing yield of crops and the farmers were seeking more promising land or finding alternative employment. In 1826 the digging of the first Welland Canal was underway and 25 of the community's younger men were lured away by the prospect of earning steady wages.

In 1850 the original log chapel was replaced by a frame church. The congregation then consisted of about 50 families, but before the end of that decade, the railway age had arrived in southern Ontario and the exodus from rural areas such as Trafalgar to the urban areas was under way. By the late 1880s only 9 families remained on the parish list.

The present brick church was opened in 1882. Then it was closed from 1890-1938 due to the declining number of Catholic families. In 1938, the church was re-opened when Holy Rosary Milton was established as a parish. In 1982 the church received its third reconstruction when it was moved back from the road and given a new and secure foundation; basement and sanctuary. In April 1995, renovations were completed in the sanctuary and have with the installation of a new altar, dedicated to the deceased members of St. Peter's. It is the oldest church in the Diocese of Hamilton. Lately, for over 10 years, this church served the parish of St. Josephine Bakhita, at 3200 Thomas Street, Mississauga, while the community was building its own church. Since 2017, the church, which in its title has the word "mission", has been serving the Missionary Oblates of Mary Immaculate - Assumption Province program to instruct the Friends of Oblate Missions in the charism of St. Eugene and it's a special place of daily prayer for the intentions of the Catholic missions, Friends of the Missions, and our Benefactors, as well as organizing financial help for missions. Since that year, as a gift for the jubilee of the 200th anniversary - further renovations have been made in in the church sanctuary, new sacristy, better insulation of the church, new windows, and stained-glass windows (with the effigies of the Apostles), as well as renovation of the hall under the church.