This 2½-storey, brick building rests on a raised stone foundation and when it was completed in 1903, it took its place among the other luxurious single-family homes in one of Winnipeg’s expanding residential neighbourhoods – Fort Rouge.

The varied use of materials and the elements such as the large wrap-around porch and curved two-storey bay windows and heavy overhanging eaves give this home its picturesque appearance. These features are elements of the Queen Anne style and this home is one of many examples of the style in Winnipeg. This style was particularly popular for the design of opulent homes throughout North America and is identified by its use of a variety of elements and materials to reduce the amount of flat wall surface. The McArthur House includes a corner porch with delicate wood columns set on tall stone bases, rounded bay windows with stone accenting around the plain rectangular window openings and an unusual and complex roof line that includes a raised section completed by a modified Swan’s Neck pediment. The side and rear façades are less ornamentally complex.
Changes to the exterior have been fairly extensive, including a metal staircase built on the building’s southeast corner and two additions to the rear façade, a one-storey addition built in the 1960s and a three-storey structure completed in the late 1990s.

The interior has been severely altered; most of the original materials have been removed or replaced. Original features include some wood finishes around doors and windows, two open fireplaces on the ground floor and a piano window with stained-glass on the building’s west side.

The home was for many years the residence of John Duncan McArthur (1854-1927) and his wife Mary M. McArthur. J.D. McArthur arrived in Winnipeg in 1879 and after several years as a lumberman west of the city, he began a long career as a railway builder and is generally considered to have built more railway line in Canada than any other Canadian contractor. He also had extensive interests in lumber mills, real estate, finance, mining and pulp and paper and was one of the City’s wealthiest citizens. After his death in 1927, J.D. McArthur’s widow remained the owner and occupant of the Mayfair Avenue property until 1950. By 1959, the home was owned and operated as the Sir Hugh John Macdonald Memorial Hostel. This organization was named in honour of Winnipeg Police Magistrate Hugh John Macdonald (1850-1929), well known locally for his compassion and advocacy for young offenders. After his death, a group of citizens organized the hostel to continue this effort and in 1931 purchased its first house at 175 Mayfair Avenue. The organization, now known as Macdonald Youth Services, presently operates out of four buildings on Mayfair Avenue (175, 163, 161 and 159).

159 Mayfair Avenue is now used by Macdonald Youth Services to deliver its Life Training Program that focuses on teaching life skills and employment skills to disadvantaged youth between the ages of 18 to 29. The upper floors are used as offices and as is living space for five 12- to 17-year-olds operated by the Youth Addictions Stabilization Unit of Marymound Incorporated.
Elements of the building that would require approval if alterations were planned are:

Exterior:
- The south-facing brick building resting on a raised, rough-cut stone foundation located mid-block on Mayfair Avenue
- Ornate wrap-around porch with paired wooden columns on tall stone bases and robust limestone steps
- The rounded, two-storey bay windows topped by deep, curved eaves and rough-cut stone accenting of the front (south) façade
- Raised section between the bay windows with its modified Swan’s Neck pediment
- West-facing stained-glass piano window