Supplement Dated November 4, 2022 To Prospectus Supplement Dated August 25, 2021 (To Prospectus Dated August 6, 2021)



## Up to \$50,000,000 Additional Shares of Common Stock

This supplement (this "Supplement") supplements that certain prospectus supplement, dated August 25, 2021 (the "Prospectus Supplement"), relating to the offer and sale of shares of common stock, par value \$0.01 per share, of Cherry Hill Mortgage Investment Corporation from time to time through JMP Securities LLC and B. Riley Securities, Inc., as our agents (the "Agents"). Sales of shares of our common stock, if any, pursuant to this Supplement, the Prospectus Supplement and the accompanying prospectus, dated August 6, 2021 (the "Prospectus"), will be made by any method permitted by law that is deemed to be an "at the market offering" as defined in Rule 415 under the Securities Act of 1933, as amended. This Supplement should be read in conjunction with the Prospectus Supplement and the Prospectus. Capitalized terms used and not defined in this Supplement shall have the meanings given to such terms in the Prospectus Supplement.

This Supplement is being filed to reflect an increase in our existing at-the-market offering program to allow for the issuance of an additional \$50.0 million in shares of our common stock from time to time through the Sales Agents through an amendment of the Sales Agreements dated as of the date hereof. All other material terms of the offering and the Sales Agreements remain unchanged. As of the date of this Supplement, we have sold 4,951,378 shares of our common stock under the Sales Agreements for gross proceeds of \$49,073,736, leaving \$50,926,264 available to be offered by this Supplement, the Prospectus Supplement and the Prospectus.

Our common stock is traded on the New York Stock Exchange (the "NYSE") under the symbol "CHMI." The closing price of our common stock on the NYSE on November 3, 2022 was \$5.66 per share.

There are restrictions on transfer and ownership of our common stock intended to, among other purposes, preserve our qualification as a real estate investment trust ("REIT") for U.S. federal income tax purposes. Please see the section entitled "Restrictions on Ownership and Transfer" in the accompanying prospectus.

Investing in our common stock involves risk. See "Risk Factors" beginning on page S-3 of the Prospectus Supplement, page 3 of the Prospectus and in our Annual Report on Form 10-K for the year ended December 31, 2021 and other reports and information that we file from time to time with the Securities and Exchange Commission (the "SEC"), which are incorporated by reference into this Supplement, the Prospectus Supplement and the Prospectus.

Neither the SEC nor any state securities commission has approved or disapproved of these securities or determined if this Supplement, the Prospectus Supplement or the Prospectus to which the Supplement and the Prospectus Supplement relate is truthful or complete. Any representation to the contrary is a criminal offense.

JMP Securities B. Riley Securities

The date of this Supplement is November 4, 2022.