

Securities registered pursuant to Section 12(b) of the Act:

Item 8.01. Other Events.

On August 26, 2026, Hanover Bancorp, Inc. (the “Company”), the parent holding company of Hanover Community Bank, issued a press release announcing that its Board of Directors has approved a new Share Repurchase Program. Under this program, which will expire on August 17, 2027, the Company may repurchase up to 370,000 shares, or approximately 5% of its outstanding common stock. The new Share Repurchase Program will commence upon the exhaustion of the Company’s previously approved Share Repurchase Program, which was approved by the Company’s Board of Directors on October 5, 2023.

Under the Share Repurchase Program, repurchases will be made from time to time by the Company in the open market as conditions allow, or in privately negotiated transactions. All or part of the repurchases may be implemented under a Rule 10b5-1 trading plan, which would allow repurchases under pre-set terms at times when the Company might otherwise be prevented from doing so under insider trading laws or because of self-imposed blackout periods.

Except in the case of repurchases under a Rule 10b5-1 trading plan, the volume, nature, price and timing of the repurchases are at the sole discretion of management, dependent on the stock price, market conditions, applicable securities laws including SEC Rule 10b-18, corporate and regulatory requirements, capital and liquidity needs and other factors. The Share Repurchase Program does not obligate the Company to acquire any specific number of shares and the Board of Directors may suspend, discontinue, terminate, modify, cancel or extend the Share Repurchase Program at any time and for any reason.

A copy of the Company’s press release is included as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press Release dated August 26, 2026
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

HANOVER BANCORP, INC.

Date: August 26, 2026

By: /s/ Lance P. Burke

Lance P. Burke

Senior Executive Vice President and
Chief Financial Officer

**FOR IMMEDIATE RELEASE**

Investor and Press Contact:

Lance P. Burke

Chief Financial Officer

(516) 548-8500

Hanover Bancorp Approves New Share Repurchase Program

Mineola, NY – August 26, 2026 – Hanover Bancorp, Inc. (NASDAQ: HNVR) (the “Company”), parent company of Hanover Community Bank (the “Bank”), announced today that its Board of Directors has approved a new Share Repurchase Program. Under this program, which will expire on August 17, 2027, the Company may repurchase up to 370,000 shares, or approximately 5% of its outstanding common stock. The new Share Repurchase Program will commence upon the exhaustion of the Company’s previously approved Share Repurchase Program, which was approved by the Company’s Board of Directors on October 5, 2023.

Under the Share Repurchase Program, repurchases will be made from time to time by the Company in the open market as conditions allow, or in privately negotiated transactions. All or part of the repurchases may be implemented under a Rule 10b5-1 trading plan, which would allow repurchases under pre-set terms at times when the Company might otherwise be prevented from doing so under insider trading laws or because of self-imposed blackout periods.

Except in the case of repurchases under a Rule 10b5-1 trading plan, the volume, nature, price and timing of the repurchases are at the sole discretion of management, dependent on the stock price, market conditions, applicable securities laws including SEC Rule 10b-18, corporate and regulatory requirements, capital and liquidity needs and other factors. The Share Repurchase Program does not obligate the Company to acquire any specific number of shares and the Board of Directors may suspend, discontinue, terminate, modify, cancel or extend the Share Repurchase Program at any time and for any reason.

About Hanover Community Bank and Hanover Bancorp, Inc.

Hanover Bancorp, Inc. (NASDAQ: HNVR), is the bank holding company for Hanover Community Bank, a community commercial bank focusing on highly personalized and efficient services and products responsive to client needs.

Management and the Board of Directors are comprised of a select group of successful local businesspeople who are committed to the success of the Bank by knowing and understanding the metro-New York area’s financial needs and opportunities. Backed by state-of-the-art technology, Hanover offers a full range of financial services. Hanover offers a complete suite of consumer, commercial, and municipal banking products and services, including multifamily and commercial mortgages, residential loans, business loans and lines of credit. Hanover also offers its customers access to 24-hour ATM service with no fees attached, free checking with interest, telephone banking, advanced technologies in mobile and internet banking for our consumer and business customers, safe deposit boxes and much more. The Company’s corporate administrative office is located in Mineola, New York where it also operates a full-service branch office along with additional branch locations in Garden City Park, Hauppauge, Port Jefferson, Forest Hills, Flushing, Sunset Park, Rockefeller Center and Bowery, New York, and Freehold, New Jersey.

Hanover Community Bank is a member of the Federal Deposit Insurance Corporation and is an Equal Housing/Equal Opportunity Lender. For further information, call (516) 548-8500 or visit the Bank’s website at **www.hanoverbank.com**.

Forward-Looking Statements

This release may contain certain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 and may be identified by the use of such words as "may," "believe," "expect," "anticipate," "should," "plan," "estimate," "predict," "continue," "intend," and "potential" or the negative of these terms or other comparable terminology. Examples of forward-looking statements include, but are not limited to, estimates with respect to the financial condition, results of operations and business of Hanover Bancorp, Inc. Any or all of the forward-looking statements in this release and in any other public statements made by Hanover Bancorp, Inc. may turn out to be incorrect as a result of inaccurate assumptions that Hanover Bancorp, Inc. might make or by known or unknown risks and uncertainties. There are a number of important factors that could cause future results to differ materially from historical performance and these forward-looking statements. Factors that might cause such a difference include, but are not limited to: (1) the impact of a pandemic or other health crises and the government's response to such pandemic or crises on our operations as well as those of our customers and on the economy generally and in our market area specifically; (2) competitive pressures among depository institutions may increase significantly; (3) changes in the interest rate environment may reduce interest margins; (4) loan origination and sale volumes, charge-offs and credit loss provisions may vary substantially from period to period; (5) general economic conditions may be less favorable than expected; (6) political developments, wars or other hostilities may disrupt or increase volatility in securities markets or other economic conditions; (7) legislative or regulatory changes or actions may adversely affect the businesses in which Hanover Bancorp, Inc. is engaged; (8) the impacts of tariffs, sanctions and other trade policies of the United States and its global trading counterparts; (9) changing political conditions and the outcome of federal, state, and local elections and the resulting economic and other impact on the areas in which we conduct business; (10) changes and trends in the securities markets may adversely impact Hanover Bancorp, Inc.; (11) a delayed or incomplete resolution of regulatory issues could adversely impact our planning; (12) difficulties in integrating any businesses that we may acquire, which may increase our expenses and delay the achievement of any benefits that we may expect from such acquisitions; (13) our ability to successfully execute our growth strategies; (14) our ability to hire and retain key personnel; (15) the impact of reputation risk created by the developments discussed above on such matters as business generation and retention, funding and liquidity could be significant; and (16) the outcome of any future regulatory and legal investigations and proceedings may not be anticipated. Further information on other factors that could affect the financial results of Hanover Bancorp, Inc. are included in our Annual Report on Form 10-K under Item 1A – Risk Factors, as updated by our subsequent filings with the Securities and Exchange Commission. Consequently, no forward-looking statement can be guaranteed. Hanover Bancorp, Inc. does not intend to update any of the forward-looking statements after the date of this release or to conform these statements to actual events.