UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934 (Amendment No.)

Filed by the Registrant

(1) Amount Previously Paid:

(3) Filing Party: (4) Date Filed:

(2) Form, Schedule or Registration Statement No.

ý Filed by a Party other than the Registrant Check the appropriate box: Preliminary Proxy Statement Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2)) Definitive Proxy Statement Definitive Additional Materials ý Soliciting Material under §240.14a-12 Rexford Industrial Realty, Inc. (Name of Registrant as Specified in Its Charter) (Name of Person(s) Filing Proxy Statement, if other than the Registrant) Payment of Filing Fee (Check the appropriate box): No fee required Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11 (1) Title of each class of securities to which transaction applies: (2) Aggregate number of securities to which transaction applies: (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined): (4) Proposed maximum aggregate value of transaction: (5) Total fee paid: Fee paid previously with preliminary materials: Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid

previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing



Important Notice: Additional Information Regarding the Annual Meeting of Stockholders to be Held on Tuesday, May 26, 2020

The following Notice of Annual Meeting of Stockholders for the 2020 annual meeting of stockholders (the "Annual Meeting") amends and restates the original notice included in the proxy statement (the "Proxy Statement") of Rexford Industrial Realty, Inc., a Maryland corporation (the "Company"), dated April 13, 2020, which was furnished to the Company's stockholders in connection with the solicitations of proxies by the Company's Board of Directors for use at the Annual Meeting to be held on Tuesday, May 26, 2020. The purpose of this Notice is to announce a change in the place of the Annual Meeting. Due to the emerging public health impact of the COVID-19 pandemic, orders of relevant state and local governments, and to support the health and well-being of the Company's stockholders, employees and their families, the Annual Meeting will be held in a virtual-only meeting format via live audio webcast. Stockholders will not be able to attend the Annual Meeting physically in person.

This notice is being filed with the Securities and Exchange Commission and is being made available to stockholders on or about May 14, 2020.

THIS NOTICE SHOULD BE READ IN CONJUNCTION WITH THE PROXY STATEMENT

Rexford Industrial Realty, Inc. 11620 Wilshire Boulevard, Suite 1000 Los Angeles, California 90025 (310) 966-1680

NOTICE OF 2020 ANNUAL MEETING OF STOCKHOLDERS

May 14, 2020

Due to the emerging public health impact of the COVID-19 pandemic, orders of relevant state and local governments, and to support the health and well-being of our stockholders, employees, and their families, NOTICE IS HEREBY GIVEN that the place of the 2020 annual meeting of stockholders (the "Annual Meeting") of Rexford Industrial Realty, Inc., a Maryland corporation ("Rexford"), has been changed. The Annual Meeting date and time remains unchanged and will be held on Tuesday, May 26, 2020, at 8:00 a.m., Pacific Time, as previously announced. In light of the above considerations, the Annual Meeting will be held in a virtual-only meeting format via live audio webcast. You will not be able to attend the Annual Meeting physically in person.

Additional Information: As described in the previously-distributed proxy materials for the Annual Meeting, you are entitled to attend the virtual Annual Meeting if you were a stockholder at the close of business on March 31, 2020, the record date for the Annual Meeting. In order to attend the virtual Annual Meeting, please visit: https://web.lumiagm.com/218892223. Participants may begin logging into the virtual Annual Meeting at 7:00 a.m. Pacific Time on May 26, 2020.

In order to vote electronically or ask questions at the virtual Annual Meeting, stockholders of record as of the record date for the Annual Meeting may log in using the 11-digit voter control number contained on their proxy card and password of **rexford2020** to access the virtual Annual Meeting. Stockholders who hold their shares through a bank, broker or other nominee as of the record date for the Annual Meeting and who wish to vote electronically or ask questions at the virtual Annual Meeting must contact their bank, broker or other nominee to obtain a Legal Proxy and register their Legal Proxy in advance with American Stock Transfer & Trust on or before 5:00 p.m., Eastern Time, on May 21, 2020. Requests for registration should be directed to proxy@astfinancial.com or to facsimile number 718-765-8730. Written requests for registration can be mailed to:

American Stock Transfer & Trust Company LLC
Attn: Proxy Tabulation Department
6201 15th Avenue
Brooklyn, NY 11219

Requests for registration by stockholders who hold their shares through a bank, broker or other nominee and who wish to vote electronically or ask questions at the virtual Annual Meeting must be labeled as "Legal Proxy" and must be received no later than 5:00 p.m., Eastern Time, on May 21, 2020.

At the virtual Annual Meeting, our stockholders will consider and vote on the following matters:

- (1) The election of eight directors, each to serve until the next annual meeting of our stockholders and until his or her successor is duly elected and qualifies;
- (2) The ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2020;
- (3) An advisory resolution to approve the Company's named executive officer compensation for the fiscal year ended December 31, 2019, as described in the accompanying Proxy Statement;
- (4) Any other business properly introduced at the Annual Meeting or any postponement or adjournment of the Annual Meeting.

Regardless of whether you will attend the virtual Annual Meeting, please authorize your proxy electronically through the internet or by telephone or by completing and mailing your proxy card so that your votes can be cast at the Annual Meeting in accordance with your instructions. For specific instructions on authorizing a proxy, please refer to the instructions on the

proxy card, or if your shares are held in street name, the instructions provided by your broker, bank or other nominee. Authorizing a proxy in any of these ways will not prevent you from voting electronically at the virtual Annual Meeting if you are a stockholder of record as of the record date for the Annual Meeting or if you properly register in advance a proxy from a record holder.

Although the Annual Meeting will be held in a virtual-only format this year, we remain committed to stockholder engagement and currently intend to return to an in-person annual meeting for future stockholder meetings under normal circumstances.

By Order of the Board of Directors,

David Lanzer

General Counsel and Secretary

Los Angeles, California May 14, 2020

Additional Information About the Virtual Annual Meeting

Attendance and Participation

Our virtual Annual Meeting will be conducted on the Internet via live audio webcast. You will be able to view and listen to the virtual Annual Meeting online by visiting https://web.lumiagm.com/218892223.

In order to vote electronically or ask questions at the virtual Annual Meeting, stockholders of record as of the close of business on March 31, 2020, the record date for the Annual Meeting, may log in using the 11-digit voter control number contained on their proxy card and password of **rexford2020** to access the virtual Annual Meeting. Stockholders of record as of the record date for the Annual Meeting do not need to register in advance.

Stockholders who hold their shares through a bank, broker or other nominee as of the record date for the Annual Meeting and who wish to vote electronically or ask questions at the virtual Annual Meeting must contact their bank, broker or other nominee to obtain a Legal Proxy and register their Legal Proxy in advance with American Stock Transfer & Trust on or before 5:00 p.m., Eastern Time, on May 21, 2020. Requests for registration should be directed to proxy@astfinancial.com or to facsimile number 718-765-8730. Written requests for registration can be mailed to:

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6201 15th Avenue
Brooklyn, NY 11219

Requests for registration by stockholders who hold their shares through a bank, broker or other nominee and who wish to vote electronically or ask questions at the virtual Annual Meeting must be labeled as "Legal Proxy" and must be received no later than 5:00 p.m., Eastern Time, on May 21, 2020.

The virtual Annual Meeting will begin promptly at 8:00 a.m. Pacific Time on Tuesday, May 26, 2020. We encourage you to access the virtual Annual Meeting prior to the start time. Online access will begin at 7:00 a.m. Pacific Time.

The virtual Annual Meeting platform is fully supported across browsers (Internet Explorer, Firefox, Chrome, and Safari) and devices (desktops, laptops, tablets, and cell phones) running the most updated version of the applicable software and plugins. Participants should ensure they have a strong internet connection wherever they intend to participate in the virtual Annual Meeting. Participants should also allow plenty of time to log in and ensure that they can hear streaming audio prior to the start of the virtual Annual Meeting.

How to Vote electronically at the Virtual Annual Meeting

If you are the record holder of your stock as of the record date, you may submit a proxy by executing and returning your proxy card, visiting the website noted on your proxy card to vote online or using the toll-free telephone number on your proxy card to vote by telephone. You may also attend the virtual Annual Meeting and vote electronically at https://web.lumiagm.com/218892223 during the virtual Annual Meeting. You will need the 11-digit voter control number which appears on your proxy card (printed in the box and marked by the arrow) and the meeting password, rexford2020.

If a bank, broker or other nominee is the record holder of your stock on the record date, you will be able to submit a proxy by following the instructions on the voting instruction form or notice that you receive from your bank, broker or other nominee. If a bank, broker or other nominee is the record holder of your stock on the record date, you must obtain and submit a legal proxy from your broker or other nominee as the record holder and a letter from your broker or other nominee showing that you were the beneficial owner of your shares on the record date to American Stock Transfer & Trust on or before 5:00 p.m., Eastern Time, on May 21, 2020, in order to vote electronically at the virtual Annual Meeting. Requests for registration should be directed to proxy@astfinancial.com or to facsimile number 718-765-8730. Written requests for registration can be mailed to:

American Stock Transfer & Trust Company LLC
Attn: Proxy Tabulation Department
6201 15th Avenue
Brooklyn, NY 11219

Questions

Stockholders of record and stockholders who have registered a legal proxy in advance with American Stock Transfer & Trust by following the instructions noted above may submit questions at the virtual Annual Meeting after logging in. If you wish to submit a question, you may do so by logging into the virtual meeting platform at https://web.lumiagm.com/218892223, typing your questions into the appropriate field, and clicking "Submit."

Appropriate questions related to the business of the Annual Meeting (the proposals being voted upon) will be answered during the Annual Meeting, subject to time constraints.

Technical Difficulties

Help and technical support for accessing and participating in the virtual Annual Meeting is available at https://go.lumiglobal.com/faq.

On May 14, 2020, Rexford Industrial Realty, Inc. issued the following press release regarding the change in location of its 2020 annual meeting of stockholders to a virtual annual meeting.



REXFORD INDUSTRIAL ANNOUNCES CHANGE TO VIRTUAL FORMAT FOR 2020 ANNUAL MEETING OF STOCKHOLDERS

Los Angeles - May 14, 2020 - Rexford Industrial Realty, Inc. (the "Company" or "Rexford Industrial") (NYSE: REXR), a real estate investment trust focused on creating value by investing in and operating industrial properties located in Southern California infill markets, today announced that it will be holding its Annual Meeting of Stockholders (the "Annual Meeting") as a virtual only meeting, via live audio webcast, due to the public health threat and impact of the COVID-19 pandemic. This year, stockholders will not be able to physically attend the Annual Meeting.

In order to view and listen to the virtual Annual Meeting online, please visit: https://web.lumiagm.com/218892223. Participants may begin logging into the Annual Meeting at 7:00 a.m. Pacific Time on May 26, 2020.

In order to vote electronically or ask questions at the virtual Annual Meeting, stockholders of record as of the close of business on March 31, 2020, the record date for the Annual Meeting, may log in using the 11-digit voter control number contained on their proxy card and password of rexford2020 to access the meeting. Stockholders who hold their shares through a bank, broker or other nominee as of the record date for the Annual Meeting and who wish to vote electronically or ask questions at the virtual Annual Meeting must contact their bank, broker or other nominee to obtain a Legal Proxy and register their Legal Proxy in advance with American Stock Transfer & Trust on or before 5:00 p.m., Eastern Time, on May 21, 2020. Requests for registration should be directed to proxy@astfinancial.com or to facsimile number 718-765-8730. Written requests for registration can be mailed to:

American Stock Transfer & Trust Company LLC
Attn: Proxy Tabulation Department
6201 15th Avenue
Brooklyn, NY 11219

Requests for registration must be labeled as "Legal Proxy" and must be received no later than 5:00 p.m., Eastern Time, on May 21, 2020.

Whether or not they plan to attend the Annual Meeting, all stockholders as of the close of business on March 31, 2020, the record date, may also authorize a proxy in advance of the meeting until 11:59 p.m. Eastern Time on May 25, 2020 at www.voteproxy.com or by using one of the other methods described in the proxy materials for the Annual Meeting filed with the Securities and Exchange Commission (the "SEC") on April 13, 2020. Stockholders who have already authorized a proxy, and who do not wish to change their vote, do not need to vote again.

Further information regarding this change to the location and format of the Annual Meeting can be found in the supplemental proxy materials filed by Rexford Industrial with the SEC on May 14, 2020.

Although the Annual Meeting will be held in a virtual-only format this year, Rexford Industrial remains committed to stockholder engagement and currently intends to return to an in-person annual meeting for future stockholder meetings under normal circumstances.

About Rexford Industrial

Rexford Industrial, a real estate investment trust focused on creating value by investing in and operating industrial properties throughout Southern California infill markets, owns 225 properties with approximately 27.6 million rentable square feet and manages an additional 20 properties with approximately 1.0 million rentable square feet. For additional information, visit www.rexfordindustrial.com.

Forward-Looking Statements

This press release may contain forward-looking statements within the meaning of the federal securities laws, which are based on current expectations, forecasts and assumptions that involve risks and uncertainties that could cause actual outcomes and results to differ materially. Forward-looking statements relate to expectations, beliefs, projections, future plans and strategies, anticipated events or trends and similar expressions concerning matters that are not historical facts. In some cases, you can identify forward-looking statements by the use of forward-looking terminology such as "may," "will," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," or "potential" or the negative of these words and phrases or similar words or phrases which are predictions of or indicate future events or trends and which do not relate solely to historical matters. While forward-looking statements reflect the Company's good faith beliefs, assumptions and expectations, they are not guarantees of future performance. For a further discussion of these and other factors that could cause the Company's future results to differ materially from any forward-looking statements, see the reports and other filings by the Company with the U.S. Securities and Exchange Commission, including the Company's Annual Report on Form 10-K for the year ended December 31, 2019 and the Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 filed with the SEC. The Company disclaims any obligation to publicly update or revise any forward-looking statement to reflect changes in underlying assumptions or factors, of new information, data or methods, future events or other changes.

Contact:

Investor Relations: Stephen Swett 424 256 2153 ext. 401 investorrelations@rexfordindustrial.com