UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): October 17, 2014

REXFORD INDUSTRIAL REALTY, INC.

(Exact name of registrant as specified in its charter)

Maryland (State or other jurisdiction of incorporation) 001-36008 (Commission File Number) 46-2024407 (IRS Employer Identification No.)

11620 Wilshire Boulevard, Suite 1000, Los Angeles, California (Address of principal executive offices)

90025 (Zip Code)

Registrant's telephone number, including area code: (310) 966-1680

\$N/A\$ (Former name or former address, if changed since last report.)

| Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instructions A.2.): | |
|---|--|
| | Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425) |
| | Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12) |
| | Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b)) |
| | Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c)) |

Item 1.01 Entry into a Material Definitive Agreement.

On October 17, 2014, Rexford Industrial Realty, Inc. (the "Company") through its operating partnership, Rexford Industrial Realty, L.P., entered into an agreement (the "Agreement") with a third-party seller (the "Seller") to acquire an industrial portfolio located in our Ventura County submarket consisting of six properties, aggregating 408,224 square feet for a purchase price of \$39.0 million. The Company expects to utilize cash on hand to fund the acquisition.

The Company made a deposit of \$0.8 million upon entering into the Agreement, which may be refunded to the Company if it elects to terminate the transaction prior to the expiration of the due diligence period for any reason. Upon the expiration of the due diligence period, if the Company elects to proceed with the transaction, the deposit will be non-refundable, except in the case of a Seller default or failure to satisfy closing conditions. The acquisition is scheduled to close in the fourth quarter of 2014, subject to the satisfaction of customary closing conditions.

There is no assurance that the Company will acquire the Property because the proposed acquisition is subject to a variety of factors, including the completion of our due diligence procedures and the satisfaction of customary closing conditions.

SIGNATURES

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

Rexford Industrial Realty, Inc.

October 24, 2014 /s/ Michael S. Frankel

Michael S. Frankel

Co-Chief Executive Officer (Principal Executive Officer)

October 24, 2014 Rexford Industrial Realty, Inc.

/s/ Howard Schwimmer

Howard Schwimmer Co-Chief Executive Officer (Principal Executive Officer)